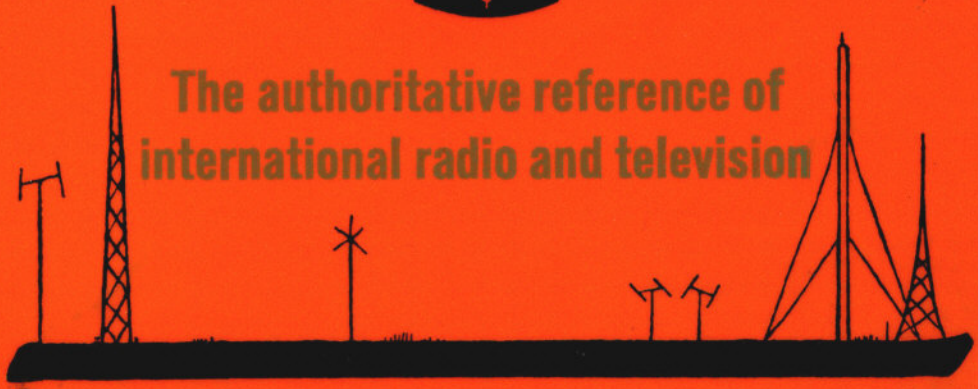
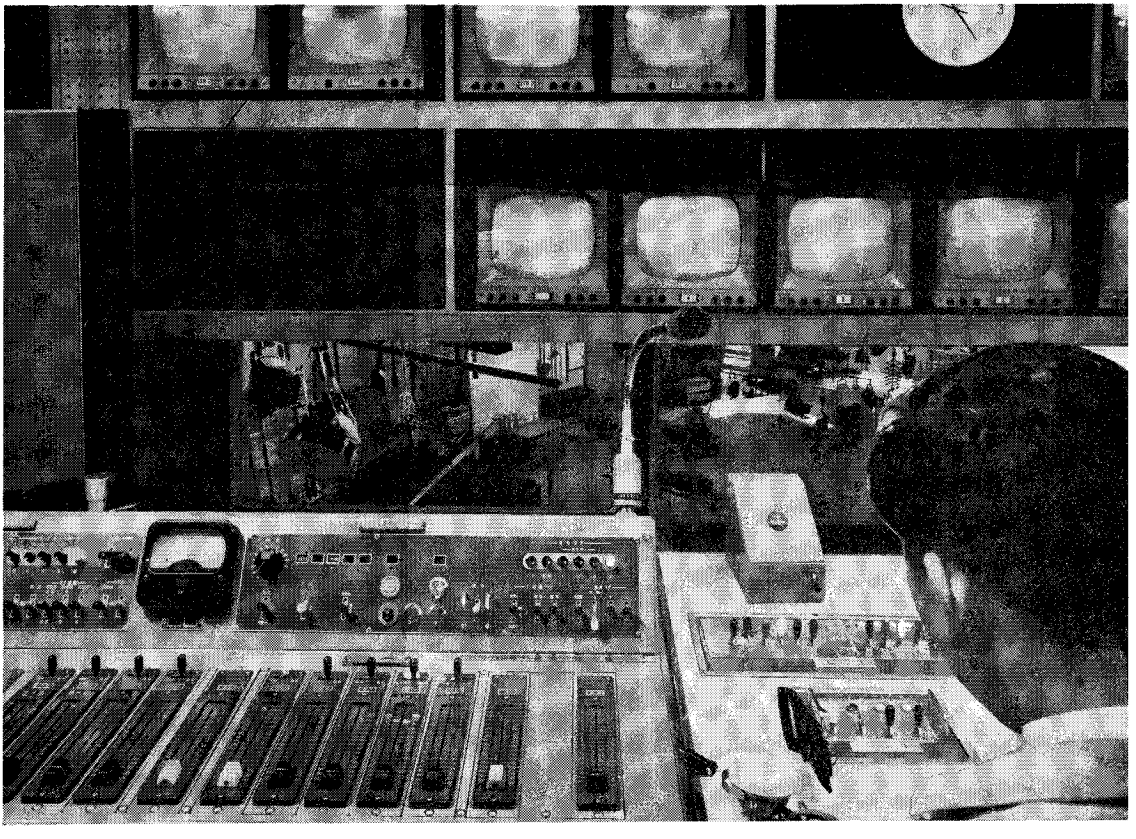
WORLD RADIO TV HANDBOOK

1965 • 19th. edition

The authoritative reference of international radio and television





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14.00–14.45	15190	I
14.45–15.30	17910	III
14.45–15.30	21545	IV
14.45–15.30	6070	V
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18.30–19.15	11800	I
20.00–20.45	9545	IV
20.00–20.45	6070	V
20.50–21.35	11800	X
21.30–22.15	6070/9545	V

French	kc	Area
17.45–18.30	11800	VIII
17.45–18.30	6070	V
19.15–20.00	11800	VIII
19.15–20.00	6070/9545	V
20.45–21.30	6070/9545	V
Hausa		
15.45–16.30	6070	V
18.30–19.15	6070/9545	V
Portuguese		
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16.45–17.30	21545	II
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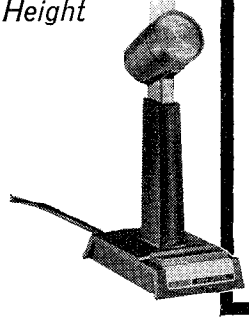

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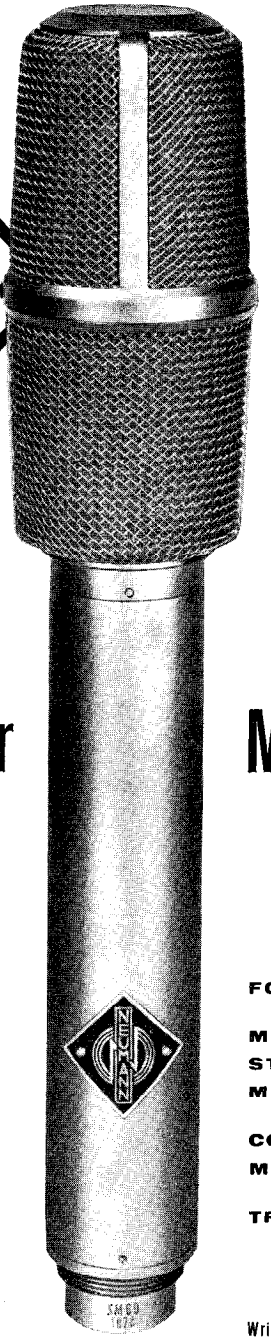

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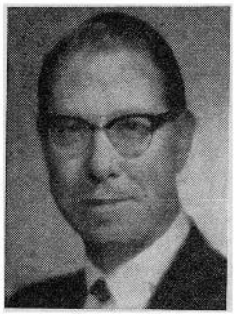

Henrik Hahr

When the European Broadcasting Union (EBU) was formed in Torquay in February 1950 only a limited number of broadcasting services had introduced regular television programmes. Today—when the General Assembly meets—the interest is in a very high degree directed towards all the intricate problems which have followed the rapid development of international television.

The procedures of satellite transmissions, the approach of colour television, several new and difficult legal questions as well as numerous already familiar problems of the television world today are consequently on the agenda of the EBU.

It would be wrong, however, to assume that only television is occupying the minds of all the distinguished directors-general and their experts and the permanent services of the EBU in Geneva and Brussels. At its last meeting in Vienna in June 1964, the General Assembly created a new committee — a Sound Broadcasting Programme Committee which will take its place beside already existing committees, i. e. the Legal and Technical Committees and the Programme Committee for Television. The problems of sound radio are now of such importance that creation of a permanent body is regarded as highly justified. Two aspects are stressed in the connection: the necessity of assistance to developing countries where television has still a long way to go, and the position of sound radio as a medium in its own right beside the television services of the world.

From being a rather small gathering, the EBU has now grown into an important organization with worldwide connections. The active members from countries situated in the European Broadcasting Zone as defined by the European Broadcasting Convention consist of 28 broadcasting services in 25 countries. The associate members—to be found in all continents outside Europe—number 37 broadcasting organizations in 27 countries including the USA.

It is characteristic of the work of the EBU today that it is at the same time to be compared with what is going on in important international bodies and what is happening in the departments of programme planning and foreign relations and in the control rooms of national broadcasting organizations with regular programme services. The EBU is consequently a platform for deliberations, discussions and common decisions as well as an international concern with day-to-day operations consisting of international exchange of programmes mostly within the area of Eurovision. This twofold task of the union gives it a special position among international organizations and adds a special flavour to the work.

There is, indeed, much work to be done and even more in the future. The "summit" meeting in Helsinki in June 1964 between the presidents and other representatives of the EBU and its counterpart in eastern Europe, OIRT, shows clear tendencies to widen the contacts. To this should be added the discussions which have been had with the President of the URTNA, the African broadcasting union, and with representatives of the new Asian broadcasting union, as well as with the American broadcasting services.

A final word should be said concerning the positive results achieved during the Second World Conference on School Broadcasting in Tokyo in 1964. The first international conference of this kind, promoted by the EBU following a proposal of one of its Vice-Presidents, Mr. Rodinò, and organized by the RAI in Rome in 1961, showed the great possibilities of international cooperation in this field. The Tokyo Conference, organized by the NHK under the auspices of the EBU and presided over by Mr. Rodinò, confirmed the importance and the necessity of these professional gatherings. Consequently the EBU and its members are looking forward with great expectation to the third conference of the kind which the ORTF has kindly offered to organize in Paris in 1967.

The EBU's capacities are those of its members. It is of great importance for this union to be able to elect as its leaders eminent experts and personalities. During the General Assembly in Vienna the union unanimously elected Mr. Marcello Rodinò as President as from the 1st January, 1965. Mr. Olof Rydbeck, Director General of the Sveriges Radio, who had been President during four eventful years, was elected Honorary President as a recognition of his excellent leadership and the great services he had rendered the EBU.

The activities of the EBU are of an all-embracing kind concerning broadcasting matters. Different opinions are put forward and debated but in the end good and sound solutions always seem to be found, owing to the fact that the EBU as a professional, non-political organization groups together experts with concrete knowledge of broadcasting and a will to do their best for the listening and viewing public. In that respect we welcome all information that can be given on a large scale about the possibilities of broadcasting in the world today. I take this opportunity to wish you every success with the publication of the 19th edition of the World Radio TV Handbook.

HENRIK HAHR
Director, EBU Administrative Office
Geneva

Frank S. Cook

It is an undeniable fact that there is a direct relationship between privilege and responsibility. The greater the privileges enjoyed by an individual or a nation, the greater the responsibility enjoined upon that individual or that nation. This is particularly true in the ministry of broadcasting and television. And we use the term "ministry" advisedly, for broadcasting and television have long ago ceased to be merely a means of mass entertainment. It still is that, but far more important, it is the means of moulding the thinking and consequently the actions of millions who daily sit by their radios in their homes, in public places and in auto-

Continued page 4

Television
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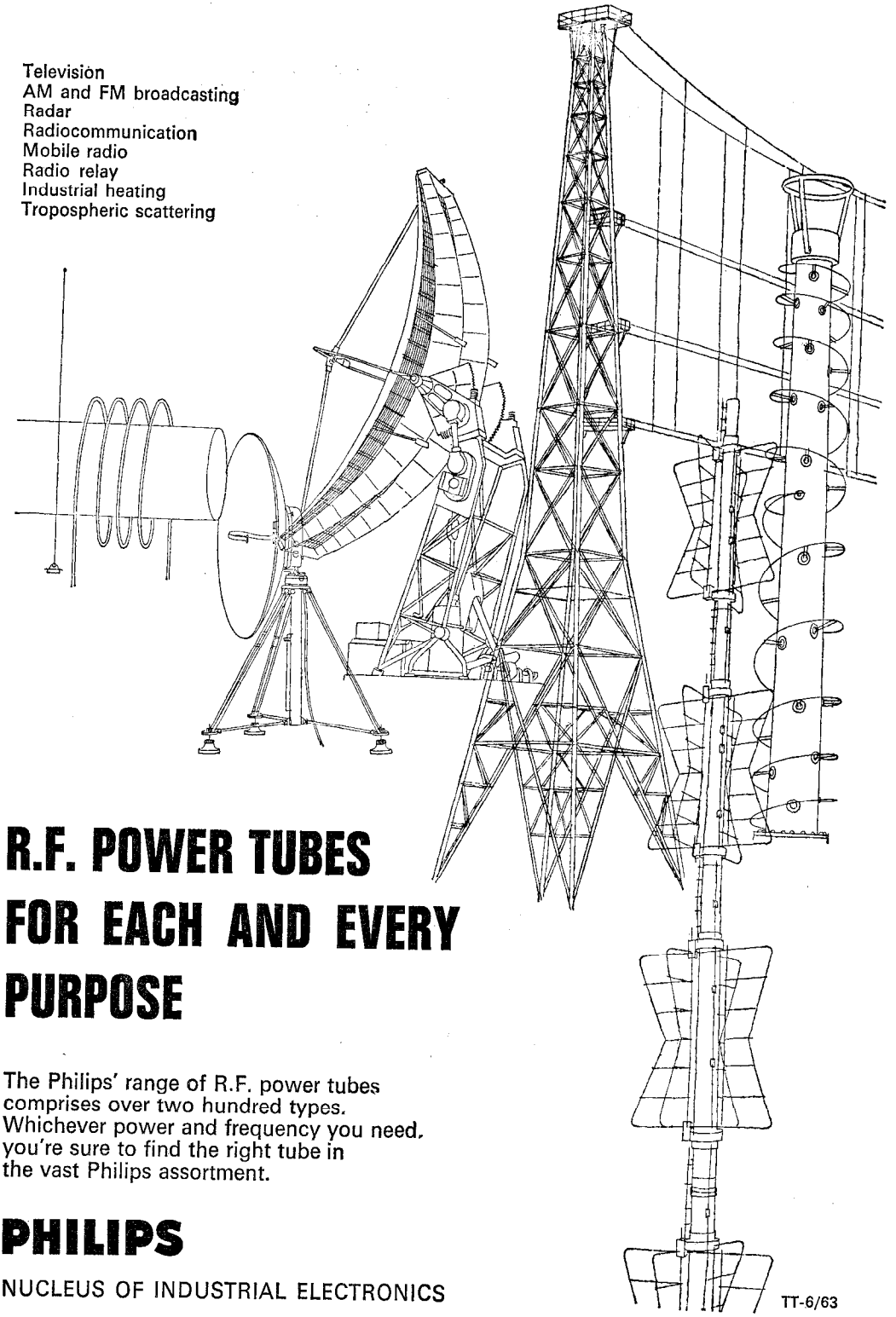

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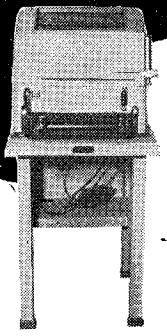

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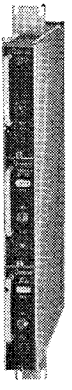

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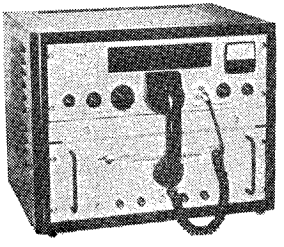

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AUSTRIA: Österreichischer Rundfunk
BELGIUM: The Belgian National Broadcasting Service.
BURMA: Burma Broadcasting Service.
CANADA: Canadian Broadcasting Corp.
CYPRUS: Cyprus Broadcasting Corp.
CZECHOSLOVAKIA: Radio Prague.
DENMARK: Radio Denmark.
EIRE: Radio Eireann.
FINLAND: The Finnish Broadcasting Company
FRANCE: Radiodiffusion – Télévision Française.
GERMANY: Deutsche Welle – Bayerischer Rundfunk – Hessischer Rundfunk – Nord- u. Westdeutscher-Rundfunk – Süddeutscher Rundfunk – Südwestfunk – Radio Saarbrücken.
GHANA: Ghana Radio and Television Corp.
GREAT BRITAIN: British Broadcasting Corporation commends the aims of the WRTH.
GREECE: National Broadcasting Institute.
HOLLAND: Radio Nederland Wereldomroep.
HUNGARY: Hungarian Broadcasting Service.
INDIA: All India Radio.
INDONESIA: Radio Republik Indonesia.
IRAN: Radio Teheran.
ISRAEL: Israel Broadcasting Service.
ITALY: RAI – Radiotelevisione Italiana.
JAPAN: NHK – Broadcasting Corp. of Japan.
MALAYSIA: Radio Malaysia.
NEW ZEALAND: New Zealand Broadcasting Service.
NIGERIA: Nigerian Broadcasting Corp.
NORWAY: Norsk Rikskringkasting.
PAKISTAN: Radio Pakistan.
POLAND: Polskie Radio i Telewizja.
PORTUGAL: Emissora Nacional de Radiodifusão.
RUMANIA: Radio Bucharest,
SAUDI ARABIA: Saudi Arabia Broadcasting.
SPAIN: Radio Nacional de España. – Sociedad Española de Radiodifusion. – Red de Emisoras del Movimiento.
SWEDEN: Swedish Broadcasting Corp.
SWITZERLAND: Swiss Broadcasting Corp.
TURKEY: Radio Ankara.
SOUTH AFRICA: South African Broadcasting Corp.
USA: The Voice of America. – Radio New York Worldwide (WRUL).
USSR: The State Committee for Broadcasting and Television.
VATICAN STATE: Vatican Radio

The Editor of the World Radio Television Handbook seeks information from all stations and organizations engaged in broadcasting and/or television and interested in international broadcasting and/or television and publishes the information as communicated to him by the stations or organizations. The Editor cannot be held responsible for the correctness of this information or for not publishing schedules and other particulars of stations which do not supply this information, or for changes in the times and wavelengths of programmes made after the current edition has

WORLD RADIO TV HANDBOOK

RADIO
TELEVISION
1965

★

Published by

WORLD RADIO-TELEVISION HANDBOOK CO. Ltd.
Sundvej 6
Hellerup, Denmark
Founded by O. Lund-Johansen in 1947

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Nineteenth edition
Printed circulation: 25.000 copies

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WORLD RADIO-TELEVISION HANDBOOK CO. Ltd.

Editor: J. M. Frost. Manuscript completed November 1964. Next Edition to be published mid December 1965. Printed in Denmark by Det Berlingske Bogtrykkeri, Copenhagen, Denmark.

TABLE OF CONTENTS

	RADIO	TV
Aden	165	260
Afghanistan	165	
Albania	94	248
Algeria	146	259
Andorra	94	
Angola	146	
Argentina	225	274
Ascension Isl.	149	
Australia	189	265
Austria	94	248
Azores	96	
Bahamas	209	
Bahrain	166	
Barbados	209	272
Basutoland	149	
Bechuanaland	149	
Belgium	96	248
Bermuda	197	266
Bolivia	226	
Brazil	227	274
Brunei	166	
Bulgaria	97	248
Burma	166	
Burundi	149	
Cambodia	166	260
Cameroon	150	
Canada	198	266
Canary Islands	150	259
Cape Verde Islands	150	
C. African Rep.	151	
Ceylon	166	
Chad	151	
Chile	232	275
China P. R.	166	260
Colombia	233	275
Comores Islands	151	
Congo (Dem. Rep.)	151	
Congo (Rep.)	152	259
Cook Isl.	194	
Costa Rica	211	272
Cuba	211	272
Cyprus	169	260
Czechoslovakia	98	248
Dahomey	152	
Denmark	99	248
Dominican Rep.	212	272
Ecuador	236	275
Egypt (U.A.R.)	152	259
El Salvador	213	272
Ethiopia	153	278
Falkland Islands	240	
Faroe Islands	100	
Fiji	194	
Finland	100	248
France	102	250
Gabon	154	259
Gambia	154	
Germany Fcd. Rep.	106	250
Germany Dem. Rep.	112	253
Ghana	154	259
Gilbert & Ellice Isl.	194	
Gibraltar	113	253
Great Britain	114	253
Greece	116	254
Greenland	201	
Guadeloupe	213	
Guatemala	213	272
Guiana Br.	240	
Guiana Fr.	240	
Guinea Rep.	155	
Guinea Port.	155	
Guinea Sp.	155	
Haiti	214	272
Hawaii	194	266
Holland	117	254
Honduras, Brit.	215	
Honduras Rep.	215	272
Hong Kong	169	260
Hungary	120	254
Iceland	120	
India	170	260
Indonesia	171	262
Iran	172	262
Iraq	173	262
Ireland	121	254
Israel	173	262
Italy	121	254
Ivory Coast	155	259
Jamaica	216	273
Japan	174	262
Jordan	178	
Kenya	155	259
Korea (P.D. Rep.)	178	
Korea Rep.	178	264
Kuwait	179	264
Laos	179	
Lebanon	179	264
Leeward Islands	216	
Liberia	155	260
Libya	156	
Luxembourg	122	254
Macau	180	
Madeira Isl.	156	
Malaya	180	265
Malagasy Rep.	156	
Malawi	156	
Mali	157	
Malta	123	256
Marianas Islands	194	266
Marshall Islands	194	
Martinique	218	
Mauritania	157	
Mauritius	157	260
Mexico	218	273
Monaco	123	256
Mongolia	180	
Morocco	157	260
Mozambique	157	260
Nepal	180	
Netherlands Ant.	221	273
New Caledonia	195	
New Hebrides	195	
New Zealand	195	266
Nicaragua	222	273
Niger	159	
Nigeria	159	260
Norfolk Islands	195	
Norway	124	125
Pakistan	180	265
Panama	222	273
Papua	195	
Paraguay	240	
Peru	240	275
Philippines	182	265
Poland	126	256
Portugal	127	256
Puerto Rico	223	273
Reunion	160	260
Rumania	128	256
Rwanda	161	
Ryukyu Islands	184	265
Sabah	185	
Samoa	197	266
Sao Tomé	161	
Sarawak	185	
Saudi Arabia	185	265
Senegal	161	260
Seychelles	161	
Sierra Leone	161	260
Singapore	185	265
Solomon Islands	197	
Somali Rep.	161	
Somaliland French	161	
So. Africa Rep.	161	
So. Rhodesia	162	260
Spain	130	256
St. Pierre & Miquelon	201	
Sudan	163	260
Surinam	243	
Swan Islands	224	
Swaziland	163	
Sweden	134	256
Switzerland	137	258
Syrian Arab Rep.	186	265
Tahiti	197	
Tanganyika	163	
Taiwan	167	260
Thailand	186	265
Timor	186	
Togo	163	
Tonga	197	
Trinidad	224	274
Tunisia	163	
Turk Islands	224	
Turkey	186	265
Uganda	163	260
United Nations	209	
Upper Volta	165	260
Uruguay	243	275
U.S.A.	201	269
U.S.S.R.	140	258
Vatican State	144	
Venezuela	244	275
Vietnam (P. D. Rep.)	188	
Vietnam, Rep.	188	
Virgin Islands	224	274
Windward Islands	224	
Yemen	189	
Yugoslavia	145	259
Zambia	165	260
Zanzibar	165	

Abbreviations 82
A new, exciting Television project . 56, 278
Call Sign Allocations 78
Collaborators 246
Colour Television 28
Directory of Advertisers 302
DX-Clubs of the World 90
DX-Programmes 64
Esperanto 64
Eurovision 20, 22
Frequency bands allocated to Broadcasting, Television, Amateurs 78
How to use the WRTH 10, 12
Intercontinental Television 44, 46
Interference, Jamming, and you 36, 38
International Broadc. Organizations 14, 16
Intervision 26
Last Minute Information 246, 278
Long- & Medium-Wave Stations .. 279–282
News in English 68
Number of Listeners 84
Prefaces 04, 4, 6, 8
Program Distributors 276
Religious Broadc. Organizations 42
Short Wave Reception Conditions 1965 58
Short Wave Stations of the World 282–301
Solar Activity 1965 41
Standard Frequency & Time Signal Stations 62
Stations Broadcasting in Your Language 70
Table of the most Suitable Metre Bands 1965 60
The World of Radio Broadcasting ... 24
Voices of the World 32, 54, 66, 76, 86
Where to listen for Satellite Signals 48, 50, 52
Where to obtain the WRTH 92
World Radio 94–246
World Television 247–275
World Charts: Europe 80, 88. Africa 147; Asia 164; Pacific 187; No. America 196; C. & So. America 210.

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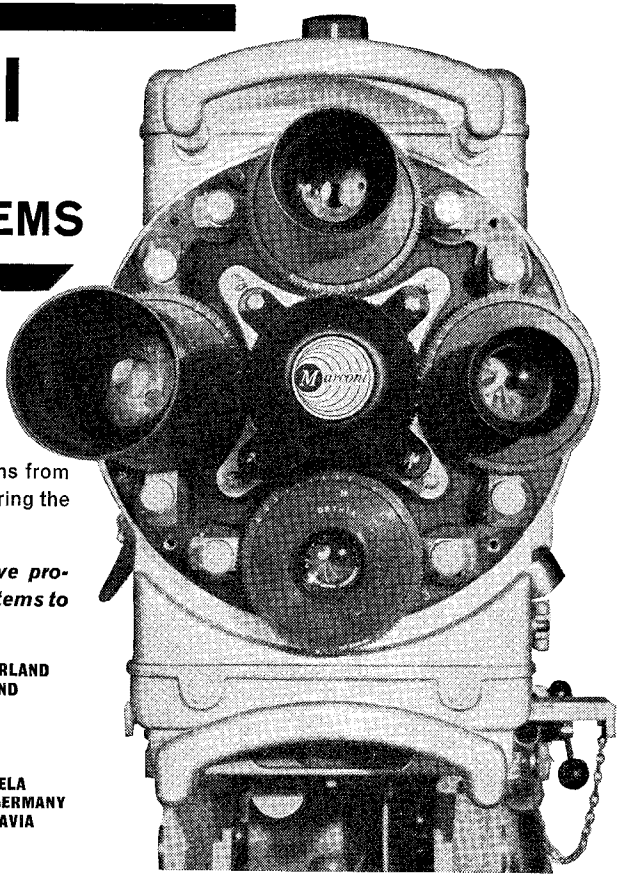

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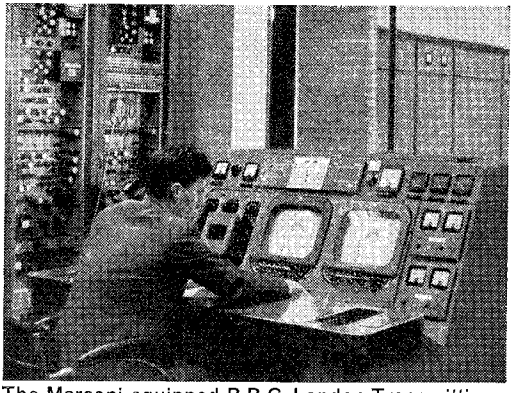

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mobiles. What a man thinks and does will be governed largely by what he sees and hears. What he sees and hears is largely the responsibility of the broadcasters.

The increased number of radio and television stations, made evident by the listings in the World Radio Television Handbook, and the increased number of listeners, made evident by the ubiquitous transistor radio and television receivers, increases our privileges—the privilege of having a share in the direction of the thoughts and destiny of mankind. That very privilege increases our responsibility, for what the world may be tomorrow will depend largely upon us. Thus the need increases for an increasingly responsible broadcasting ministry.

For thirty-three years The Voice of the Andes, Radio Station HCJB, whose studios and transmitters are located in the beautiful and hospitable land of Ecuador, has tried to keep in mind this responsibility. Owned and operated by the World Radio Missionary Fellowship, Inc., its broadcasting ministry has a twofold thrust; to *H*erald *C*hrist *J*esus' *B*lessings in its spiritual aspect, and to disseminate the best in music, news and education. That we have been successful in this is evidenced by the mail response last year of thousands upon thousands of letters from listeners in over 115 different countries.

As another edition of the World Radio Television Handbook is published, may we as broadcasters keep in mind our responsibility to God and to man.

FRANK S. COOK
Station Manager of HCJB, The Voice of The Andes

Dr. L. F. Tijmstra

The immeasurable value of modern means of communication, such as radio and television, has been stressed so often, and in so many ways, and with such well-founded arguments, that it seems hardly feasible to add any new and original ideas. All the same, one is readily prepared to write a foreword to the indispensable guide which the WORLD RADIO AND TELEVISION HANDBOOK undoubtedly is, as in this way it is possible to express one's conviction that both radio and television have a permanent and ever more important task to fulfil in a world whose physical proportions are admittedly becoming smaller, but in which there is still much to do in the way of bridging spiritual distances.

Radio and television, each in its own way, can make a lasting contribution to the spreading of knowledge and insight concerning the thinking and customs of neighbouring and far-off countries, as well as of one's own. It seems almost a platitude to say that radio and television are therefore unique media for strengthening mutual understanding between countries and population groups. Language lessons by radio, and coverages of, say, each other's activities in agriculture, trade and industry can help in this way. But to ascertain this might easily be construed as savouring of pedantry, and so conjure up a one-sided picture. However, radio and television have much more to offer than the aspects just mentioned. One need only think of the providing of simple relaxation and first-class artistic fare, which give pleassure to many over vast areas. Especially to those in lonely outposts, often thousands of miles away in sparsely peopled regions, these things can mean much. The stream of mail received by many radio stations bears witness to this.

Radio and television, if rightly employed, can thus be regarded as valuable expedients in the widening of understanding, in the providing of pleasure, and in the alleviating of loneliness. The perfection of these media is the goal upon which our efforts are turned, and in this activity the WORLD RADIO AND TELEVISION HANDBOOK has for long been rendering invaluable services.

DR. L. F. TIJMSTRA
Director-General
Radio Nederland, Hilversum, Holland

Yoshinori Maeda

NHK has a history of 40 years' radio and 12 years' television broadcasting, and as Japan's sole national service broadcasting organization financed by the subscription fees collected by ourselves from 19 million listening and viewing households, has won the confidence of the nation.

At present NHK's First Radio Network covers 99.7% of the total households and Second Radio Network 98.2%, while its General TV covers 89% Educational TV 87%. Therefore it is my earnest hope to make the coverage 100% as soon as possible by building more stations.

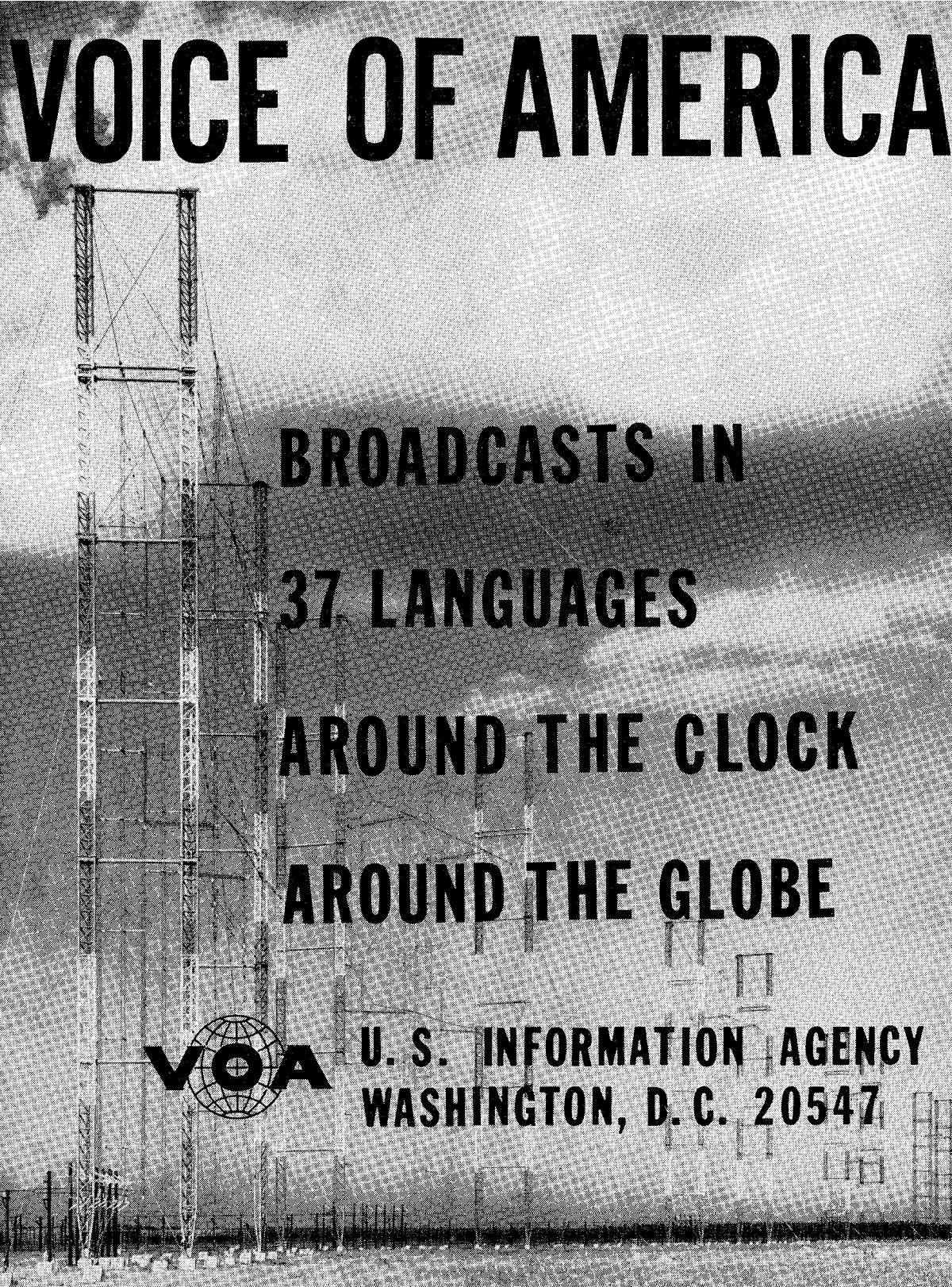
The enterprise has been established on the basis of the advancement of natural and social sciences, and I believe that broadcasting is a mass communication medium through which people of the world can mutually understand each other. Broadcasters therefore have the responsibility of fostering broadcasting as a medium which can contribute toward the establishment of world peace through mutual understanding among all nations. Thus, those of us who are engaged in broadcasting shoulder a great responsibility.

As a means to this end, NHK has been conducting exchanges of radio and TV programs with various overseas broadcasting organizations and we intend to positively carry out these exchanges in the future. For this purpose I also believe that broadcasting organizations of the world should make every effort to unite. This is not a self-justified idea of mine, for to give an example, in Europe there is the European Broadcasting Union and in Asia, the Asian Broadcasting Union has been formed, bringing together the broadcasting organizations of the Asian region.

At the Second International Conference of Broadcasting Organization on Sound and Television School Broadcasting held by NHK in Tokyo in April 1964 at the request of the EBU, I expressed this idea of a world broadcasting organization to the participating delegates from major world broadcasting organizations. They agreed to my idea and as a result, possibility has arisen of establishing a world broadcasting union.

Continued page 6

VOICE OF AMERICA



BROADCASTS IN 37 LANGUAGES AROUND THE CLOCK AROUND THE GLOBE

VOA

U. S. INFORMATION AGENCY
WASHINGTON, D. C. 20547

In this regard, international space relay techniques which have entered the practical stage will be of a great significance in exchanges of programs among world broadcasting organizations.

The last year proved a memorable one for NHK. As already mentioned, the preparation organized and held in April the Second International Conference of Broadcasting Organizations on Sound and Television School Broadcasting and NHK's radio and TV educational programs and correspondence high school programs intended for working young men and women were praised highly by the participants as models of school broadcasting.

In October last year, NHK, authorized by the Internationale Olympic Committee, successfully conducted history's greatest radio and TV broadcasts of the Tokyo Olympics. On the occasion NHK extended its cooperation to various overseas broadcasting organizations for their Olympic broadcasting. We feel it a great honor for NHK to be praised and appreciated for the successful Olympic broadcasts and for the excellent cooperation extended to foreign broadcasters.

I am certain that those who visited Japan to participate in these two important events recognized, through direct association with NHK, the position which the corporation occupies in Japan.

We of NHK are determined to advocate and recommend to foreign broadcasters what we think is right and to contribute towards the establishment of world peace and prosperity through broadcasting on the basis of Japan's national policy.

YOSHINORI MAEDA
President of Nippon Hoso Kyokai
(The Japan Broadcasting Corp.)

Josef Nichols

"Nation Shall Speak Peace Unto Nation".—The year 1965 is of the greatest importance to the international community. It is the twentieth anniversary of the United Nations and has been designated by the "General Assembly as International Co-operation Year". Significantly, it also marks the centenary of the International Telecommunication Union.

What giant steps have been made in the field of telecommunications, in broadcasting and in television from that memorable day, October 23, 1946, when the world heard for the first time our opening announcement: "This is United Nations Radio, calling the People of the World!" Since then, United Nations microphones, film and television cameras have witnessed many significant events around the world, recorded history while it was being made, and have seen the birth of new nations, large and small. United Nations Radio and Visual Services not only disseminated the news from the United Nations but also presented its meaning and its significance. Thus, by means of powerful transmitters, with the co-operation of many national broadcasting organizations, through the use of "Telstar", "Relay" and "Syncom" communications satellites, it helped to diminish the size of the world. Science, through its amazing discoveries in the field of communications, has placed into our hands not only a powerful weapon but also a challenge to the ingenuity of man, to his will to conquer fear and harness world communications into a constructive means for understanding and co-operation among nations.

Today, every country realizes the need for a powerful globe-girding voice of peace. This can only be achieved through international co-operation encompassing all broadcasting organizations of the world. This is the challenge, the motive, the hope of 1965, the "Year of International Co-operation".

JOSEF C. NICHOLS
Operations Manager
Radio and Visual Services Division
United Nations

P. J. Meyer

The mass communications media, of which radio is the one with the greatest impact in South Africa, have a responsible task in helping to build a better world by spreading reliable information to all nations. As soon as these media are suspected of dispensing propaganda, their fate is sealed. People are not sheep; they have finely-tuned antennae of their own which tell them when they are deceived. Untruths and halftruths become casualties; the truth survives.

Happy, quiet, prosperous South Africa has a message of hope and confidence for the strife-torn world, and the S.A.B.C. as South Africa's mouthpiece, extends her greetings and co-operation to fellow broadcasters everywhere through the World Radio TV Handbook.

PIETER J. MEYER
President of the Board of Governors,
South African Broadcasting Corporation

Dr. G. H. Padel

A number of people—including some Swiss—ask why this country, one of the smallest in the world, should have a short-wave service. In the very beginning, in the clouded days before the war, the reason was clear: More than one tenth of Switzerland's population had migrated to other European countries or overseas; but they still remained Swiss by nationality. Therefore, in view of the cataclysm that Europe was expecting in the thirties, some link with Switzerland, beyond censorship and mail delays, was necessary.

But speedily, as the Nazi forces occupied more and more of Europe, it was obvious that Switzerland had a second task in the shortwave field: as a neutral observer its political comment could pierce the mists of propaganda and try to get closer to the truth.

Not that the Swiss European & Overseas Service has ever been an official voice of Switzerland. Our organisation is completely free from Government intervention, for the Federal Government prefers to leave us the right of free speech, in line, naturally, with our charter, which is a very liberal

Continued page 8

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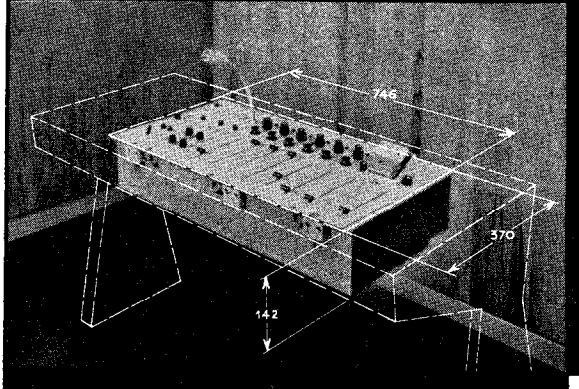

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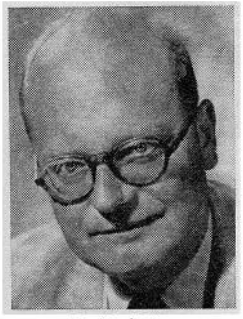
GROUPEMENT D'INSTRUMENTATION **SCHLUMBERGER**

one. This means that our news is as objective as we can make it, and that our commentators have no axes to grind: they merely express their own free opinions.

However, in line with a fairly recent measure in Swiss foreign policy, we *are* running parallel to Government policy—not in content, but in planning. Just as the Swiss Government decided a few years ago to set up a bureau for technical co-operation with the developing countries, so we decided to aim our broadcasts more and more towards developing countries, realising that they were more in need of information than the industrialised countries. Thus, we have set up a service in French and for French-speaking Africa, and in 1964, an Arabic Programme, servicing the Middle East and North Africa.

Not that this means that we are forgetting our old friends on the European Continent, in Britain and Ireland, in the United States or Asia and English-speaking Africa, any more than our long-standing listeners to programmes beamed to South and Central America in Spanish and Portuguese. The recent work we have carried out is an expansion, and we look forward to more expansion in the future, as we do more and more close collaboration with the World Radio and TV Handbook, one of the most helpful documents in broadcasting.

DR. G. H. PADEL
Director Swiss Shortwave Service



Sir Hugh Greene

The past year has been a time of great development for the BBC. In television, we began our second channel—BBC-2. Amongst its first programmes was the documentary series on "The Great War" which has now achieved international fame and has been seen by viewers in many countries. 1964 also brought one of the most important developments in BBC radio since it began more than 40 years ago. The Light Programme has been extended and now runs for more than 20 hours a day. A new, daily programme of good music has also been launched.

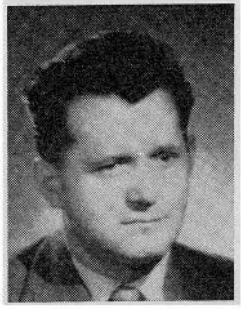
But developments in the international field have been equally important. For the BBC, a turning-point came in external broadcasting when, after 15 years of intentional interference, all Communist jamming of our European Service broadcasts came to an end in June 1964.

The BBC continued to provide many thousands of television programmes and radio transcription programmes to stations in more than 100 countries. Great importance was attached to helping the new services of the world with television material. We also continued to handle or give assistance with a great number of television transmissions via satellite and participated on the European network in many hundreds of programme exchanges.

The BBC is proud of the fact that its External Services continued to be rebroadcast regularly in more than 60 different countries by more than 100 different radio organisations (not counting radio stations in the United States). In addition, many thousands of radio programmes were exchanged last year between the BBC and broadcasting centres as far apart as Finland and Japan. Special courses and attachments were arranged for visitors from broadcasting stations in emergent countries. There was also considerable interchange of scripts and information with other radio and television organisations.

The BBC values very highly its independent position and its freedom from any kind of Government control. But we have nothing against interdependence and we are glad to see that broadcasting organisations, whatever the nature of their character, are drawing closer together. The rapid expansion of television and radio makes this inevitable if we are to give our viewers and listeners the best possible service and keep them informed of events and trends in all parts of the world. Only by ever-increasing cooperation can we play our part in helping to foster greater understanding between peoples.

SIR HUGH GREENE, K.C.M.G., O.B.E.
Director-General of
The British Broadcasting Corporation



Karel Hoffmann

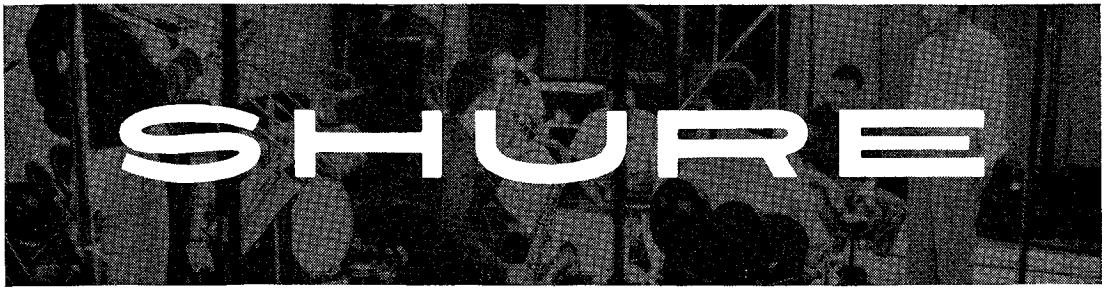
Czechoslovakia was among the first countries in Europe where radio was introduced. It also ranks among those European countries with the highest ratio of radio receivers per head of the population.

Television too has been developing at a very rapid rate, just as in the other advanced countries of the world. However, it should not be said that there is "competition" between the two, or that television is a danger. Each of the two media is seeking its own specific character and they are thus complementary.

A clarification of the radio's specific features and tasks has spurred the creative activity of radio staffs and all through the programme there is noticeable a creative flux which has found its expression in new types of programmes hallmarked first of all by a deeply human understanding of all the problems of modern man.

Czechoslovak Radio has millions of grateful and highly demanding listeners. It values their trust, listens carefully to their opinions as they are expressed in thousands and thousands of letters and is doing its best to utilise their suggestions in actual programme work. Through its foreign language broadcasts Radio Prague contacts listeners in a number of European and overseas countries. All the broadcasts of Czechoslovak Radio, whether home or foreign programmes, have one overriding aim: to make a contribution to better understanding among the world's nations and to extend their knowledge of each other. An important feature in this work is the steadily increasing cooperation with radio stations of all continents which makes possible a wide exchange of radio programmes and authors. In all this the WRTH is a very valuable aid. Czechoslovak Radio is determined, through all its resources, to serve the cause of progress, friendship and peace. The very useful Handbook which has given itself the same aim is to be wished full success.

KAREL HOFFMANN
Director General, Czechoslovak Radio



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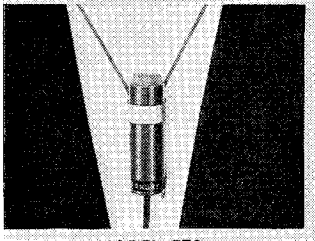
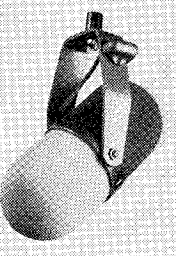
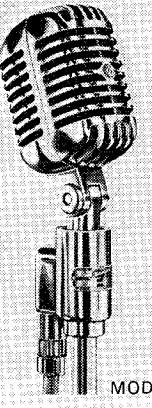


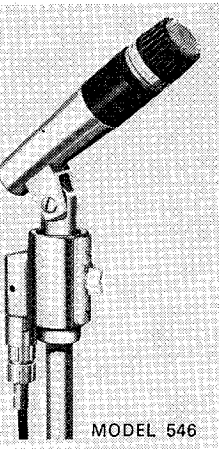
MODEL 570



MODEL SM5



MODEL 556S



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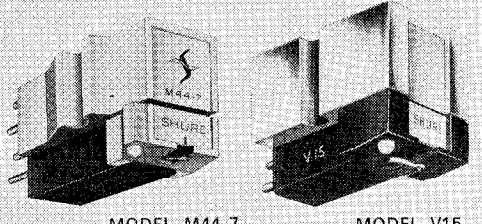

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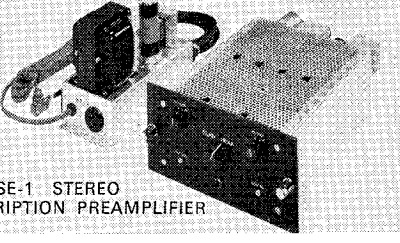

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HOW TO USE THE WORLD RADIO TELEVISION HANDBOOK

The World Radio Television Handbook is designed to help the international radio listener obtain maximum enjoyment from his receiver.

The first section of the Handbook contains instructive articles relating to broadcasting, information regarding broadcasting and television organizations, and popular technical articles and tables of practical value to listeners.

The main section of the book (pages 00—00) contains detailed information, by country, of the **Radio Stations** and broadcasting organizations of every country in the world, including names and addresses of broadcasting companies, names and titles of leading officials, lists of broadcasting stations in each country, including frequencies, wavelengths, transmitter power, call signs (if used), and station names. Program information is also listed, including times, frequencies, and beam areas of the broadcasts in each language. The announced **location** of the st., rel. st's exc., is usually the studio and administrative location, since the tr's are often located in outlying areas.—**Power** is stated in kilowatt (kW) or Watt (W). When two powers are listed, the figures represent the lower and upper limits of power, where a station uses more than one tr. on the frequency at different times (s.w.) or varies the power of the tr. for day and night operation (m.w.).

A **listing by frequency and wavelength** of the shortwave stations of the world, and long and medium wave stations of Europe, North Africa, Near East is presented in the last part of the Handbook, for use in facilitating the identification of stations.

Abbreviations: See page 00 for explanation.

Short-wave stations may be used either for domestic broadcasting to listeners in the same country or for international broadcasting directed to listeners in other countries.

International short-wave stations usually employ directional antennas to beam their programs to particular areas on frequencies calculated for best reception. Most international broadcasts are scheduled for the evening hours in the intended reception area, but some are in the morning or at other times during the day. The reception areas give their names to the services: European Service, Far Eastern Service, North American Service, etc. Languages employed are those of the listeners in the area to which the broadcast is directed, also the language of the transmitting country for reception by persons understanding that language.

Best reception is usually obtained from transmissions directed to your area. However, there is a considerable amount of overlapping between many service areas and, therefore, it is often possible to obtain good reception of programs beamed to adjacent areas, and sometimes, even of programs directed to distant parts of the world. Shortwave propagation conditions change continually because of the influence of daylight and darkness, seasonal effects and solar activity. Consequently, good reception requires frequency change from time to time.

Domestic short-wave stations are usually of lower power than international stations, and generally use non-directional or wide beam antennas, in order to reach local or national audiences. These stations make fewer seasonal frequency changes, and many operate on the same channel for both day and night operation. The stations are utilized to reach areas of a country where coverage by medium and long wave stations is not adequate.

Long and Medium wave stations are used mainly for transmitting programs to listeners in the country in which the stations are located. These stations vary from powerful transmitters capable of being heard throughout the country to low power stations intended only for a small area in the vicinity of the transmitter.

FM (Frequency Modulation) Stations operate on very high frequencies (VHF); ranges of 88-108 Mc in the Americas and 87-100 Mc in other areas, and provide interference-free reception over a short radius. Most FM stations relay programs of a medium or long wave station.

Frequency and Wavelength — Frequencies are measured in kilocycles per second (kc/s) and megacycles per second (Mc/s). A kilocycle is 1000 cycles. A megacycles is 1000 kilocycles. Wavelengths are measured in meters.

A formula between frequency and wavelength is as follows: Frequency (kc/s) $\times$ Wavelength (m) = 300000. Wavelength (m) $= \frac{300000}{\text{Frequency (kc/s)}}$ and Frequency (kc/s) $= \frac{300000}{\text{Wavelength (m)}}$.

Due to the propagational conditions, interference by other stations, jamming, malfunction of transmitter, reallocation of frequencies by a country or convention, or for some other reason, stations may use frequencies which are at variance with the frequency(ies) indicated in this handbook.

Program times used in the listings are based on the 24 hour clock. Midnight is 00.00 hours, 3 a.m. is 03.00 hours, 9 a.m. is 09.00 hours, and midday is 12.00 hours. Then, instead of starting another 12 hour cycle (p.m.), under the 24 hour system the hours increase until midnight. Thus 3 p.m. is 15.00 hours, 10 p.m. is 22.00 hours, and so on until 23.59 (11.59 p.m.) is reached and a new 24-hour cycle starts. This system eliminates any confusion between times a.m. and p.m.

Time Conversion: All programs are listed in GMT (Greenwich Mean Time). To convert from GMT to your local time, refer to the World Time Table on page 00 to determine how many hours your time is ahead or behind GMT, and add or subtract that amount in order to convert to your clock time. For quick conversion, it is useful to write the GMT hours, 00 to 24, down on one side of a sheet of paper, and then enter the correct local time opposite each GMT hour. Summer time or Daylight Saving time, adds an hour to local time, so this should be taken into account in countries where it is utilized.

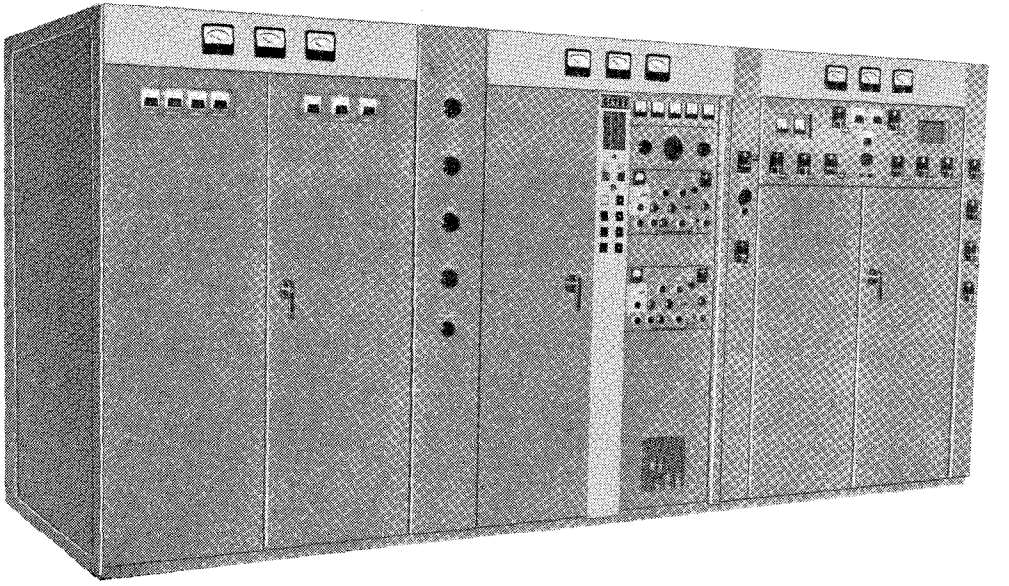
Program schedules: The program schedules of many countries are divided into Home Services and Foreign Services. The Home Service programs are arranged by language and by program services or networks. The Foreign Service transmissions are generally arranged by beam area, and by language for each beam area. The times and frequencies of the programs in each language are listed together, in order to facilitate the determination of the times and frequencies of the broadcasts in each language. The times of news broadcasts and other program features are also included.

Therefore, if you wish to hear a broadcast in a particular language from a country, refer to the listing for that country of the time and frequency of broadcasts in that language. Most broadcasts are transmitted on more than one frequency, so try the various frequencies listed, to determine which one is received best at your location.

This field-proven 100 kilowatt HF broadcast transmitter, Model HF-100, will provide unquestionable reliability under extreme environmental conditions with an operating economy second to none for service in the international shortwave broadcast band.

Employing high level modulation, the HF-100 features a straightforward design with front panel tuning and only six major different tube types. It is completely air cooled, and for added dependability includes silicon rectifiers in the high voltage power supplies. Extra long life is also assured through intercubicle wiring and oversized components.

Thousands of Gates transmitters, including the HF-100 Model, are operating in more than 75 countries around the world. When planning to install, enlarge or improve your broadcast facilities, it will pay you to consult Gates. Transmitters are available in all powers from 100 watts to 100,000 watts.



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HOW TO USE *(continued from page 10)*

Identification of Stations: Most stations in Europe, Middle East, Africa and Asia identify by announcing their station name and location. Most stations in North America and Pacific (incl. Australia/New Zealand) identify by the use of a call sign of three to five letters or a combination of letters and figures, of which the first, or first two, denote the nationality in accordance with the international list of prefixes. Most stations in Latin America use a call sign (sometimes not frequently announced), a station name, and location.

In addition, many stations use musical interval signals at sign on and between programs, in order to help listeners to find the station on their dial and identify it as the desired station. These interval signals are included in the country listings.

How to Identify a Station by Frequency or Wavelength: When you hear a station that is unknown to you, first try to determine some clue to its identity by attempting to determine the language, noting the type of program, etc. Then, note the approximate frequency or wavelength indicated on your dial, and turn to the table "Short-wave Stations of the World" in the back of the Handbook, and ascertain what stations operate in that vicinity. Next, check the program listings to determine which of the stations are scheduled to operate at that time of day, and which are most likely to be audible at your location, depending on the power and distance away. For definite confirmation, it is desirable to wait for station announcement or interval signal.

Frequency Changes: The frequencies listed are those which were scheduled for use at the time of publication. However, due to a number of reasons, including interference and changes in propagation conditions, it may be necessary for a country to make frequency changes. Often only one of the frequencies on a program will be changed, so the new frequency can be determined by tuning in the other frequencies and listening for the announcement of the frequencies being used. Reference to a publication listing the latest frequency changes for the International Stations: the **Summer-Supplement to the WRTH** (published by mid June each year) or a monthly short-wave listeners publication issued in your country, is also helpful.

Interference: Due to the present crowded condition of the medium and short wave broadcasting bands, interference may be encountered from other stations operating on the same or closely adjacent frequency. In addition to interference from other broadcast stations, there may also be interference from "jammers", which transmit a variety of noises in an attempt to prevent certain foreign broadcasts from being heard in the country operating the jammers. When interference is encountered, try another of the listed or announced frequencies, if several are in use, or try a broadcast at another time. See also article "Interferences" page 00.

Reception from Hard-to-Hear Countries: If you wish to hear a station or program from a particular country, refer to the listing from that country, determining first whether it has any broadcasts beamed towards your area or adjacent areas, if not, refer to the frequency, time and power listing to determine where and when reception might be possible. Also, note the bands and times when stations in other countries in that part of the world are audible. It is possible to hear many far distant stations, even if they do not beam programs to your area, by listening when the propagation and clearness of channel conditions are favorable.

Verification by QSL-cards: As indicated in the program listings for the various countries, many stations are interested in receiving reports from listeners about their transmissions. These stations acknowledge reports by sending listeners a QSL card (verification) or letter. Most **international** broadcasting stations do not require enclosure of return postage and will reply with a QSL card or letter. **Domestic** broadcasting stations do not normally request reports from foreign listeners, so return postage should be sent with reports to these stations. Return postage should be sent in the form of an International Reply Coupon (IRC), obtainable at post offices in most countries. Reports should be sent to the station address given in the country listings. They can be written in English in most cases, but Spanish is preferred by South and Central American stations.

Reception reports are useful to radio engineers in selecting the most suitable frequencies for broadcasts beamed to your area. Reports are preferred in the SINPO code, which is as follow:

S (Signal Strength)	I (Interference)	N (Noise)	P (Propagation Disturb.	O (Overall Merit)
5 excellent	5 nil	5 nil	5 nil	5 excellent
4 good	4 slight	4 slight	4 slight	4 good
3 fair	3 moderate	3 moderate	3 moderate	3 fair
2 poor	2 severe	2 severe	2 severe	2 poor
1 barely aud.	1 extreme	1 extreme	1 extreme	1 unusable

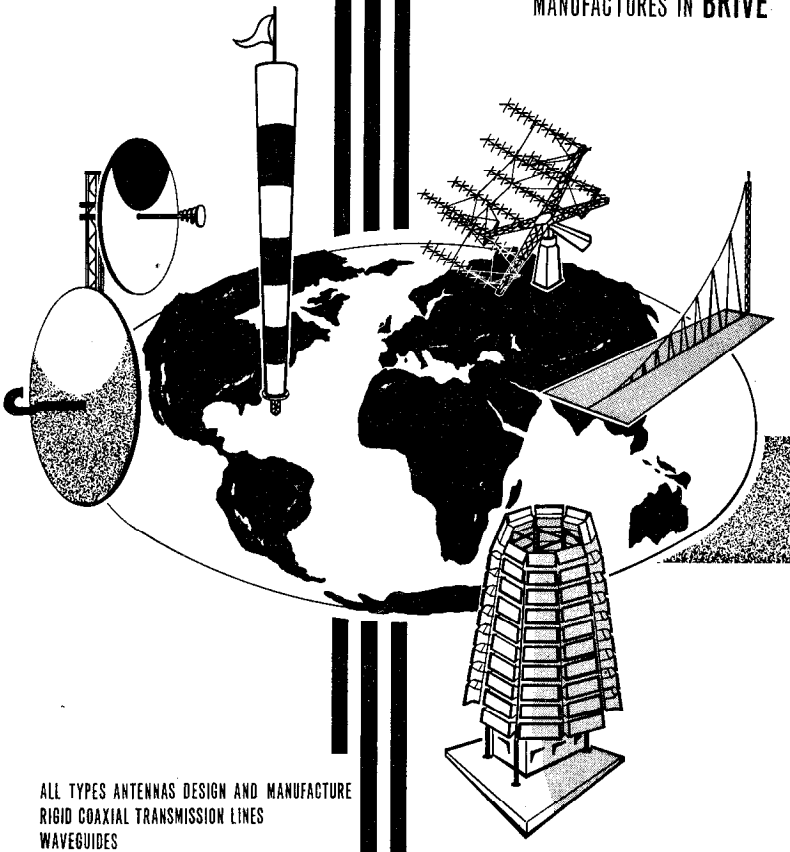
Information about **Television Stations** is provided in the section following the sound radio section, including names and addresses of Television companies, location, power and channel of Television stations, and program schedules of these stations.

With reference to the first Television page we give a short explanation of some of the technical words and figures mentioned — The announced **location** of the station is usually the studio location, since most TV tr's are situated upon the highest location in the area in order to obtain more widespread coverage—Two systems of **modulation** are used to transmit the audio signal of the TV st's either frequency modulation (FM) or amplitude modulation (AM). All video transmissions are normally amplitude modulated — **Polarization** signals are horizontally polarized (H) or are vertically polarized (V). Polarization is usually selected according to the need for a reduction of interference with other stations, or to obtain engineering standards required by the government of the country in which the st. is located—The **band width** is shown in Mc and represents the limits within which both the video and audio tr. are contained—**Number of lines** transmitted express the number necessary to form one complete frame or picture, and **frames** state the number of times per second the picture area is completely scanned—**Video and Audio Power** is indicated in kilowatt (kW) or Watt (W). In the most cases the figures denote the effective radiated power (ERP) due to the stations antenna system—**Video and Audio frequency** is stated in Mc per sec. The relationship between the quoted figures and the limits of the video band varies among countries and can be determined by reference to the standards of the systems used by the resp. countries.

HYPERELEC

124-130, AVENUE LEDRU ROLLIN, PARIS 11° ☎ 797 99 30

MANUFACTURES IN BRIVE **FRANCE**



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INTERNATIONAL BROADCASTING AND TELEVISION ORGANIZATIONS

EUROPEAN BROADCASTING UNION (EBU)
UNION EUROPEENNE DE RADIODIFFUSION (UER)
EUROVISION

Seat and Administrative Office: 1, rue de Varembé, Geneva, Switzerland.
Technical Centre: 32, av. Albert Lancaster, Brussels, Belgium.
Receiving and Measuring Station: Jurbise (Belgium).
International Television Coordination Centre (Eurovision): Palais de Justice, Brussels.
Administrative Council: President: M. Rodinò, Managing Director, RAI-Radiotelevisione Italiana. Vice-Presidents: Mr. J.B. Broeksz, Administrative Councillor, NTS-NRU (Associations of Dutch Radio and Television Organizations). Sir Hugh Greene, Director-General, BBC (British Broadcasting Corporation).
Administrators: Representatives of broadcasting organizations in: Denmark, Finland, France, Germany (Fed. Rep.), Ireland, Italy, Netherlands, Portugal, Switzerland, United Kingdom (BBC) and Yugoslavia.
Directors: Director, Administrative Office: H. Hahr. **Director of Legal Affairs:** G. Straschnov. **Director of Technical Centre:** G. Hansen.
Active Members: The broadcasting organizations of: Austria, Belgium, Denmark, Finland, France, German Fed. Rep. (ARD, ZDF), Greece, Iceland, Ireland, Israel, Italy, Lebanon, Luxembourg, Monaco, Netherlands, Norway, Portugal (ENR, RTP), Spain, Sweden, Switzerland, Tunisia, Turkey, United Kingdom (BBC, ITA/ITCA), Vatican State, Yugoslavia.
Associate Members: The broadcasting organizations of: Australia (ABC, Federation of Australian Commercial Television Stations), Brazil (Associação Brasileira de Emissoras de Rádio e Televisão, Diarios Associados Ltda., Emissoras Unidas de Rádio e Televisão), Canada (CBC), Ceylon, Chad, Congo (Léopoldville), Cyprus, Dahomey, Gabon, Ghana, Haiti, Ivory Coast, Japan (NHK, NAB), Kenya, Malawi, Malta, Morocco, New Zealand, Niger, Nigeria, Pakistan, Rep. of South Africa, Southern Rhodesia, Tanganyika, United States (ABC, BFA, CBS, NAEB, NBC, NET, US Information Agency), Upper Volta, Zambia.
Publications: EBU Review – every month in English and French, published in two separate parts: A (Technical) and B (General and Legal) – Long and Medium wave reports (European Area) – Lists of European stations (long and medium waves, UHF sound broadcasting, and television) – Monographs.

INTERNATIONAL RADIO AND TELEVISION ORGANIZATION OIRT

Addr: 15, U Mrázovky, Prague 5 Czechoslovakia. **Cable:** Interadif, Praha.
Nature: International Organization dealing with practical and theoretical questions connected with broadcasting and television prgr's and technique and cooperation between broadcasting and television organizations.
Governing Body: General Assembly consisting of one representative for each active member.
Administrative Council: Consisting of 7 to 13 members, Chairman for 1963–1965: István Tömpe, President of the Hungarian Radio and Television. Vice-Chairman for 1963–65: R. Kane, General Director of the Radiodiffusion Nationale of the Republic of Mali, and S. Zhalan-Azhav, President of the Information and Radio Administration of the Mongolian People's Rep.
Members: Representatives of the Radio and Television Organizations of the Bulgarian People's Rep; Finland, Hungarian People's Rep; Latvian SSR; Republic of Mali; Mongolian People's Rep; Chinese People's Rep; Czechoslovak S. Rep, and the U.S.S.R.
Members: Radio and Television Organizations of: The People's Rep. of Albania; Belorussian SSR; People's Rep. of Bulgaria; Chinese People's Rep; Rep. of Cuba; Czechoslovak S. Rep; United Arab Rep; Estonian SSR; Finland; German Democratic Rep; Hungarian People's Rep; Iraq; Korean People's Democratic Rep; Latvian SSR; Lithuanian SSR; Rep. of Mali; Moldavian SSR; People's Rep. of Mongolia; People's Rep. of Poland; Rumanian People's Rep; Ukrainian SSR; Union of Soviet Socialist Rep; People's Democratic Rep. of Vietnam.
Facilities: Administrative Office and Technical Centre, Prague, Czechoslovakia.
Specialized Commissions: Technical Commission: Chairman: K. Kozlowski, Polish People's Rep; Radio Prgr. Commission: Chairman: R. Grimmer, First Vice-President of the Radio & Television Organization of the German Democratic Rep; Television Prgr. Commission and Intervision Council: Chairman: N. A. Skatchko, Ukrainian SSR.
Publications: Review of the International Radio and Television Organization (OIRT) "Radio & Television" in English, French, Russian and German, issued every two months. Monthly OIRT Information, and quarterly Catalogues of prgr's suitable for exchange: a) radio, b) television.
Meetings: General Assembly every two years, Administrative Council every year.
Relations with all important organizations active in the field of radio and television.

INTERNATIONAL TELECOMMUNICATION UNION

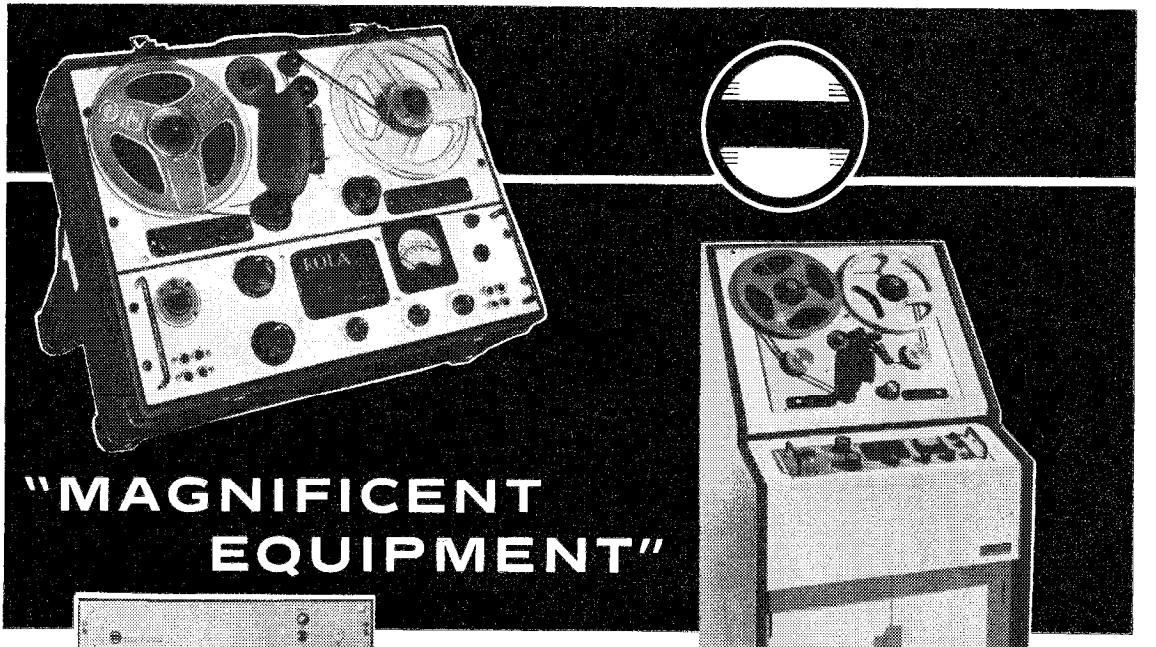
Addr: Place des Nations, Geneva, Switzerland. Te: 34.80.00.
Secretary General: Gerald C. Gross, USA.
Intern. Frequency Registration Board (IFRB). Chairman: René Petit, France.
Intern. Tel. & Tel. Consultative Committee (CCITT). Dir: J. Rouviére, France.
Intern. Radio Consultative Committee (CCIR). Dir. ad interim: Leslie W. Hayes, United Kingdom. Study Group X (broadcasting). Chairman: A. P. Walker, USA; Study Group XI (Television), Chairman: E. Esping, Sweden; Study Group XII (Tropical Broadc.), Chairman: N. V. Gadadhar, India.
Administrative Council: Argentina, Australia, Brazil, Canada, China, Colombia, Czechoslovakia, Ethiopia, France, Germany (Fed. Rep. of), India, Iran, Italy, Mexico, Morocco, Philippines, Spain, Switzerland, Tunisia, United Arab Rep, United Kingdom, United States, USSR, Yugoslavia.
Membership (124 Members, 2 Associate Members): **Members:** Afghanistan, Albanian People's Rep, Algeria Rep, Saudi Arabia (Kingdom), Argentine Rep, Australia, Austria, Belgium, Bielorussian SSR, Burma (Union), Bolivia, Brazil, Bulgarian People's Rep, Burundi (Kingdom), Cambodia (Kingdom of), Cameroon Fed. Rep, Canada, C. African Rep, Ceylon, Chile, China, Cyprus Rep, Vatican State, Colombia Rep, Congo Rep (Brazzaville), Congo Rep (Leopoldville), Korea Rep, Costa Rica, Ivory Coast Rep, Cuba, Dahomey Rep, Denmark, Dominican Rep, El Salvador Rep, Terr. represented by the French Overseas Post and Telecomm. Agency, Ecuador, Spain, USA, Ethiopia, Finland, France, Gabon Rep, Ghana, Greece, Guatamala, Guinea Rep, Haiti Rep, Upper Volta Rep, Honduras Rep, Hungaria, India Rep, Indonesia Rep, Iran, Iraq Rep, Ireland, Iceland, Israel (State of), Italy, Jamaica, Japan, Jordan (Hashemite Kingdom), Kenya, Kuwait, Laos (Kingdom), Lebanon Rep, Libya (Kingdom), Liechtenstein (Principality of), Luxembourg, Malaya Fed, Malagasy Rep, Mali Rep, Morocco Kingdom, Mauritania (Islamic Rep), Mexico, Monaco, Mongolian People's Rep, Nepal, Nicaragua, Niger Rep, Nigeria Fed, Norway, New Zealand, Uganda, Pakistan, Panama, Paraguay, Netherlands Kingdom, Peru, Philippines Rep, Poland People's Rep, Portugal, Sp. Provinces in Africa, Portuguese Overseas, Syrian Arab Rep, United Arab Rep, Fed. Rep. of Germany, Fed. People's Rep. of Yugoslavia, Ukrainian SSR, Somali Rep, Southern Rhodesia, Roumanian People's Rep, U.K, Rwanda Rep, Sénégal Rep, Sierra Leone, Sudan Rep, So. Africa Rep, Sweden, Switzerland (Confederation), Tanganyika, Chad Rep, Czechoslovak People's Rep, Terr. of USA, Overseas Terr. for the intern. relations of which the Go. of the U.K. are responsible, Thailand, Togolese Rep, Tunisia, Turkey, USSR, Uruguay Rep, Venezuela Rep, Vietnam Rep, Yemen – **Associate members:** Malawi, Northern Rhodesia.

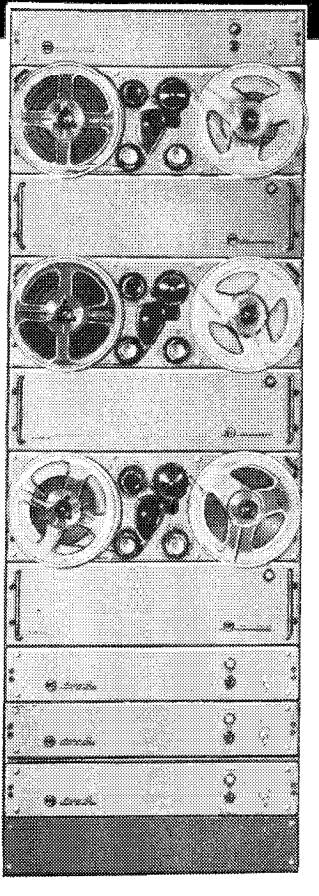
UNESCO

(United Nations Educational, Scientific and Cultural Organization).
Addr: Place de Fontenoy, Paris 7, France – **L.P:** Dir. Gen: René Maheu.
Department of Mass Communication: Dir: Tor Gjesdal.
Radio and Visual Information Division: Chief: Hans R. van Stuwe. Deputy Chief: Gerald S. Wade – Regional Units: Jean Bhownagary (Asia). Anatoli Bolgarev (Russian language production). Jean Calvel (French language production). Rex Keating (English language production). Fernando Restrepo (Spanish language production). Gerald S. Wade (North America).
Mass Communication Techniques Division: Chief: Pierre Navaux. Radio and TV techniques: Henry R. Cassirer.

ASOCIACION INTERAMERICANA DE RADIODIFUSION (AIR)

President: Sr. Fernando Eleta. Address, Aptdo. 1795, Panamá. Vice Pres's: Sr. Lic. Félix Cardona Moreno (Apdo 3955, Caracas, Venezuela). Secr: Sr. Boris Eserski (Apdo Postal 720), Edificio Palomo, San Salvador, El – Salvador).
AIR is an association of the broadcasting corporations of the American countries. Founded in 1946 it represents more than 5000 broadcasting and 400 television stations. Its purpose is to preserve free and stable broadcasting, promote cooperation between broadcasting corporations and the public authorities, to raise the cultural level of the peoples, to work for the preservation of freedom of utterance and instruction and a closer feeling of association between the private broadcasting corporations on the American Conti-





Top Left: ROLA Model 77 Mk. III Portable Recorder. Right: ROLA 777 Studio Console. Left: ROLA Auto Station for Automatic Tape Programming.

For the past 10 years ROLA Professional Quality Tape Recorders have been standard equipment for the Australian Post Office and for most of the Commonwealth's 110 Commercial Broadcasting Stations. They are also widely used in New Zealand, India and South East Asia. This is not surprising for these individually handcrafted ROLA recorders have been designed to combine outstanding Record/Replay characteristics with complete operating flexibility and long term reliability of operation. The ROLA range includes Studio Consoles, Portable Recorders and equipment for Automatic Programming.

Full Technical Details on Application

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CABLES: ROLA, MELBOURNE

nent. AIR has agreed with Sociedad Interamericana de Prensa about the revision of the so-called Panama Doctrine for the purpose of increasing the practical effectiveness of that pact and of making it a permanent means of defence for the preservation of democratic principle. AIR is recognized by the United Nations and collaborates with UNESCO, with the International Union of Telecommunications and with the organization of the American States. AIR has subscribed to the "Panama Doctrine" in which the American Radio and Press declare themselves united against any attack on individual liberty and restriction of the freedom of utterance.
PUB: Monthly Bulletin "AIR" Calle de Tiber 100–8°, México D.F. Editor: Vicente Verni.

ASIAN BROADCASTING UNION

The Fifth Asian Broadcasting Conference was held in Seoul, Rep. of Korea from 1st to 5th October 1963. The representatives of the National Broadc. Organization in Australia, Rep. of China, India, Japan, Rep. of Korea, New Zealand, Pakistan, Philippines, United Arab Rep. and Vietnam resolved to recommend to their respective authorities the establishment of the Asian Broadcasting Union (ABU) and to adopt as constitution **Statutes of the Asian Broadcasting Union.**
The ABU headquarter is established in Tokyo. In the interim between the conclusion of the fifth conference and the first conference of ABU in 1964 NHK has offered to set up a provisional secretariat with Ichiro Matsui, Man. Dir. of Overseas Broadc. Dept. NHK as Acting Secretary General.
Because the medium frequency band is extremely congested and several countries of the Asian and Pacific region are having difficulty in securing such channels, it was resolved that a study group with membership: ABC, AIR, BCC, KBS, NHK (Chairman), NZBC, UARBC be appointed with the aim of examining by correspondence technical problems regarding the most effective use of the frequency spectrum for m.w. broadcasting; and that this study group should meet immediately before the next Conference to prepare a report for the Engineering Committee of that Conference.
The Conference resolved to accept with gratitude and appreciation the kind invitation of the ABC to hold the First A.B.U. Conference in Sydney.

AFRICAN RADIO TELEVISION UNION (URTNA)

URTNA is a Union of National Broadcasting Organizations of all independent Africa, its aims, under article 2 of its statutes are: – "The U.R.T.N.A. has no commercial aims. Its objects are: –

(a) To support in every field the interests of those African organisations operating radio and or television services that have accepted the present statutes and to establish relations with other international organisations.
(b) to promote and coordinate the study of all questions relating to broadcasting and to secure the exchange of information on all matters of general interest to those radio and or television services.
(c) to take all possible steps designed to assist the development of African radio and television in all its forms.
to seek within the framework of African co-operation, the solution to any differences that may arise between members.
(e) to use its good offices to ensure respect by all members for the provisions of international and inter-African agreements relating to all aspects of radio and television."

The Union headquarters is at the moment in Dakar and its Technical Centre at Bamako – The Pres. of the Union is Mr. W. F.Coleman, Ghana; Vice-Pres. M. Messaoudi Zitouni, Algeria. The Director of the Administrative Centre at the headquarters is Mr. H. Younes. Members of the Administrative Council of the Union are Ghanz, Algeria, Senegal, Mali, Cameroun, Ivory Coast, Guinea, Nigeria and Ethiopia – The Headquarters address of the Union is U.R.T.N.A, 15, Boulevard de la Republique, Dakar, Senegal.

UNIVERSITE RADIOPHONIQUE ET TELEVISUELLE INTERNATIONALE (U.R.I.)

Founded by R.T.F. 1949.
Addr: 116, Ave. du President Kennedy, Paris 16°, France.
The Standing Committee of the International Radio-Television University (URI) meets twice a year in Paris between sessions of the General Assembly which are held every two years. This Committee provides continuity in the running of the URI.
This Committee comprised Mr. Théo Fleischman, president.
Radio Commission: Mr. René Dovaz, Hon. director of Radio Geneva; Mr. Gian Franco Zaffrani, Secr. Gen. & Dir. of International Relations, Radiotelevisione Italiana; Dr. Henning Wicht, Dir. of Prgr's, Hessischer Rundfunk; Mr. André Payette, permanent delegate of R. Canada in Paris.
Television Commission: Mr. Sergio Pugliese, Dir. of Italian TV; Mr. Nic Bal, Dir. of Cultural Prgr's of Flemish TV; Mr. Peter Bokor, Dir. of Prgr's of the Hungarian TV.
France: Mr. Pierre de Boisdeffre, Dir. de la Radio à O.R.T.F; Mr. Michel Robida, Deputy Dir. of International Relations O.R.T.F, Mr. Armand Lanoux, Secr. General of U.R.I.
43 countries have joined the work of URI.

COMMONWEALTH BROADCASTING CONFERENCE

Members: the national public service broadcasting organizations which are responsible for the planning and presentation of the broadcast programmes of independent Commonwealth countries.
The Fifth Conference, held in Canada in May/June 1963 was attended by the chief executives and others from the following organizations: All India Radio, Australian Broadcasting Commission, British Broadcasting Corporation, Canadian Broadcasting Corporation, Cyprus Broadcasting Corporation, Ghana Broadcasting Corporation, Jamaica Broadcasting Corporation, New Zealand Broadcasting Corporation, Nigerian Broadcasting Corporation, Radio Ceylon, Radio Malaya, Radio Pakistan, Sierra Leone Broadcasting Service and Tanganyika Broadcasting Corporation.
The Conference, acknowledging the mutual benefit of the Commonwealth conception and links in radio and television broadcasting as in other fields, examined means of increasing programme interchange between member organizations and of providing mutual assistance in the training of staff. Agreeing on the importance and necessity of the free flow of information, members undertook, in the interests of promoting greater ease in newsgathering and reporting, to use their influence with the authorities concerned to seek removal of restrictions on the export of undeveloped film and of duties on tape and film recordings, and the elimination of delays in customs clearance of film cameras, sound recorders etc. The Conference reaffirmed its conviction that broadcasting is a public trust, and discussed aspects of educational, rural and multilingual programming with special reference to the social and economic needs of developing countries. Engineering and technical matters, covering all aspects of broadcasting, were discussed by a special committee; and a further sub-committee examined copyright and other legal problems affecting broadcasting as a whole.
The decision was taken to establish a Conference Secretariat in London, on an experimental basis, to facilitate continuity between Conference meetings in the interchange of information in the fields of programming, administration and engineering.
The Sixth Conference will meet in Nigeria in September 1965.
Secretariat address: Broadcasting House, London W.1.

A MESSAGE FROM THE EDITOR

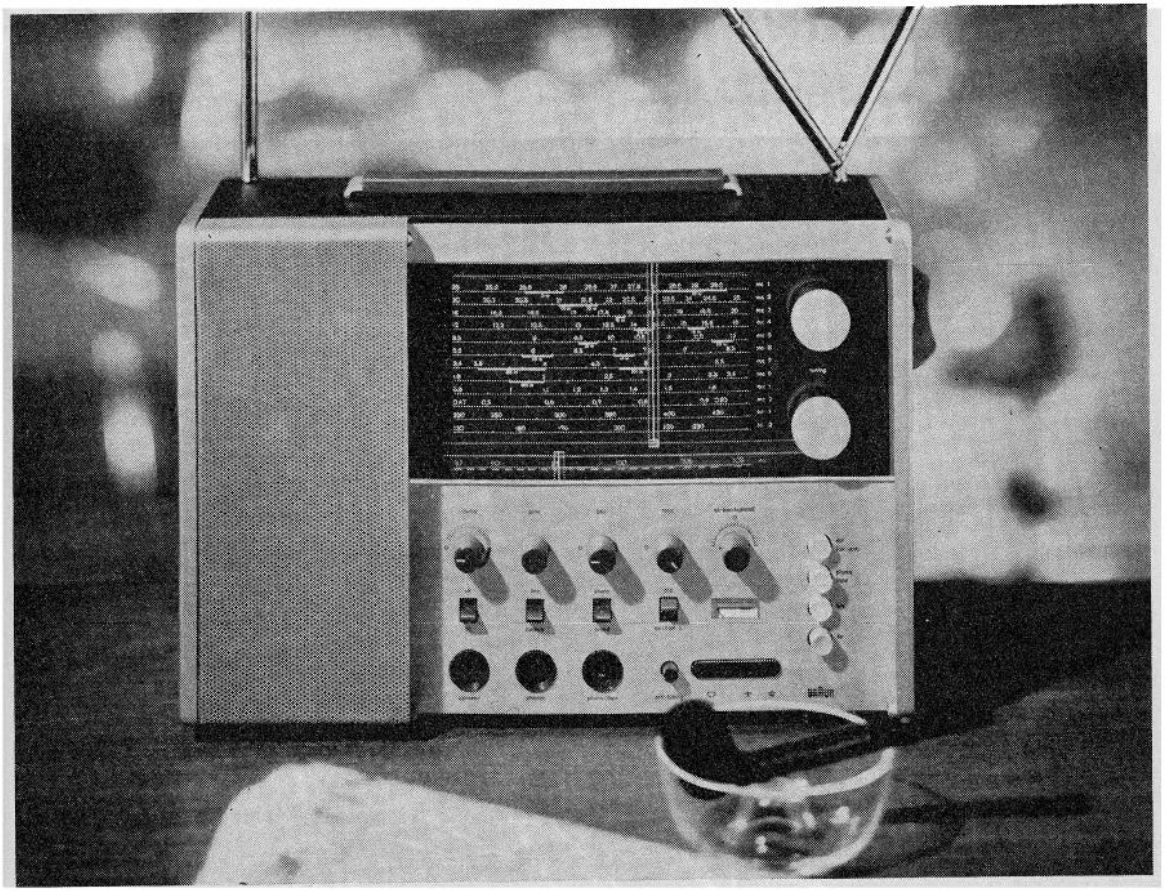
This is the nineteenth edition of the World Radio Television Handbook in which we have attached importance to giving as much practical information as possible to short wave listeners in order to make it easier and quicker for them to pick up the broadcasts of the various countries and to identify the stations.

We have three wishes to advance: the one is to help us by making WRTH as well-known as possible in all circles interested in radio and television in general and in *short wave listening in particular;* the other is to receive your criticism and wishes in regard to the contents of the 1965 edition.

To radio and television stations we direct an earnest appeal to send us *regularly* all corrections and particulars of extensions, which will then be passed on for the benefit of listeners all over the world.

Thanks are due to all those who have assisted in various ways in the preparation of this edition – to all broadcasting and television organisations irrespective of politics, race or religion – to radio clubs and contributors in many countries all over the world, and to our many faithful advertisers.

J. M. FROST



Universal All Band Radio

The T1000 is a universal radio and heterodyne receiver. Its 13 wave bands cover nearly all frequencies currently used for broadcasting throughout the world: Commercial and amateur, citizens bands and telegraphy, maritime and aeronautical broadcasts.

On FM the sensivity, selectivity, and noise suppression factors of the T1000 were pushed to the highest limits.
The short wave section is particularly well developed. Spread over eight bands, it permits the entire short-wave range from 1.6 to 30 mc to be received. Large, easy-to-read dials provide easy tuning. The instrument's bandspread affords precise station selection. A drum-type band selector with high repeat-exactness permits even weak stations to be quickly retuned.

The instrument's input sensivity reaches or surpasses that of commercial receivers. Automatic volume control (AVC) works on three stages. It is defeatable for direction finding purposes. In this case the desired sensivity may be set manually.

T1000

The T1000's selectivity is outstanding, its image rejection excellent. Broad or narrow bandwidth are switch selected. A beat frequency osciliator permits heterodyne reception.

The instrument operates on built-in mono cells (plus a separate one for the dial lighting), on a power pack of 6, 12, or 24 volts DC, or on 110/220 volts AC.

For information please write to:
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6 Frankfurt am Main (Germany),
Rüsselsheimer Straße

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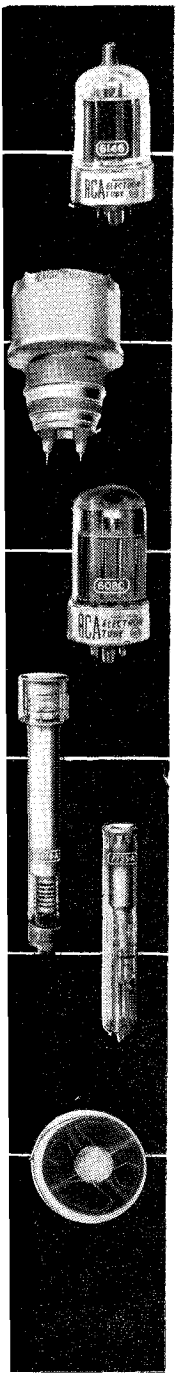

Whether you concern yourself only with audio, or with audio-visual applications, there's an RCA Power Tube or Imaging device for every broadcast need. RCA-devised techniques developed for space-age applications are being employed to advantage in all RCA Tubes to optimize their usefulness in broadcasting.

SMALL POWER TUBES. Shown is RCA-6146, a typical example of an RCA Beam Power Tube. It is part of a line of small power tubes for design and replacement in transmitter applications for CW, AM, or SSB. The RCA line, including both glass and ceramic-metal types, offers a wide choice of input and output ratings for use over a wide frequency range. Other popular small power tube types are: RCA-807, -813, and 866A.

LARGE POWER TUBES. Shown is RCA-6166A/7007. Continuing search for tube betterment has increased the life expectancy and improved the performance of RCA-6166A/7007, an example of design and performance available in a wide choice of broadcast tubes for audio and video service at VHF and UHF.

INDUSTRIAL RECEIVING TUBES. Shown is the RCA-6080. Numerous designs offering operating efficiency, high reliability, compactness, and long life are available for new designs or direct replacement.

IMAGE ORTHICONS. Shown is the RCA-5820A, typical of the RCA Image Orthicon line whose performance rivals that of any on the market today. For color and black-and-white pickup—studio or outdoor—you can always be sure of improved background uniformity, higher signal output levels, higher signal to noise ratio, reduced microphonics, and improved sensitivity. Other popular types: RCA-7293A and -7295A.

VIDICONS. Shown is RCA-7735A. RCA has vidicons for every TV application. In the industry's broadest line of types, you can find a size, sensitivity, and range of electrical characteristics to meet color and black-and-white TV pickup requirements exactly. Custom types, too.

MAGNETIC RECORDING TAPE. You get Red Seal quality sound in RCA's scientifically-processed magnetic tape, available in lengths and thicknesses and base materials to suit your professional recording needs. Available for home use as well.

Additional information on these products is available through your local RCA Distributor. For technical bulletins on Power Tubes, Vidicons and Orthicons, write to: Advertising Department, RCA International Division, Section 200, Clark, New Jersey, U.S.A.

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EUROVISION IN 1964

By J. Treeby Dickinson, Chief Engineer, Technical Centre of the E.B.U.

1964 has indeed been a noteworthy year for Eurovision, the international television exchanges effected by the broadcasting organisations that are Members of the European Broadcasting Union. The year began with the Winter Olympic Games in Austria, on 6th June the E.B.U. celebrated the Tenth Anniversary of Eurovision, on 8th April there was a demonstration of the transmission of colour television over the Eurovision Network and during October the Olympic Games in Japan provided the occasion for the largest scale, most complicated and certainly the most costly operation yet undertaken within the Eurovision framework. In addition, there were the usual annual events such as the Eurovision Song Contest, held this year in København, with 21 Members participating, the programme being broadcast in 18 countries.

Ten years of Eurovision

Eurovision officially came into existence on 6th June, 1954, the first day of the "Lille Experiment", which comprised daily transmissions of different kinds over a temporary television network linking Belgium, Denmark, France, Germany, Italy, the Netherlands, Switzerland and the United Kingdom, the object being to prove the procedure that had been worked out for handling international television relays. The operation was so called because it was directed from a temporary Coordination Centre at Lille (France), kindly provided by the R.T.F. (now the O.R.T.F.), that place having been chosen because it provided easy monitoring of 405-line signals from Britain and 819-line signals from France, as well as the 625-line signals utilised in the other countries. The enthusiastic response of the public and Press to the programmes transmitted during the four weeks of the experiment was such that the broadcasting organisations concerned had no hesitation in embarking on schemes for undertaking such exchanges on a routine basis—one of these schemes was the construction and equipment of the permanent Coordination Centre in Brussels, which was taken into service in December, 1955. Almost immediately afterwards, the first large-scale operation was undertaken : the Winter Olympic Games from Cortina d'Ampezzo in January, 1956. Another innovation was introduced in December, 1957 : the first multiple-origin programme, broadcast simultaneously by nearly all the connected television services.

In the early years, most of the programmes exchanged had been of sporting events and public ceremonies, but slowly the proportion of news-items and topical transmissions increased. All television services illustrate their domestic news bulletins with short film sequences made on the spot during the day, and it was realised at an early date that, if all their films could be pooled, the E.B.U. Members would have at their disposal an unequalled source of news-pictures. The problem was to deliver the film in time for broadcasting the same evening, and attention naturally turned to the Eurovision Network. Service-trials lasting a few weeks of what became known as the Daily News-Exchange Scheme were held in October, 1958 and May, 1959 and although they were most successful, the scheme was considered too costly.

July, 1960 was notable in the history of Eurovision for the coverage of the Olympic Games in Rome, which gave rise to transmissions of unprecedented complexity.

Throughout these years, the Eurovision Network had also been growing in extent, as well as in density. To the eight countries that had been connected at the beginning, three more had been added in 1956, one in 1958, two each in 1959 and 1960, and one each in 1961 and 1963. At the same time, more vision circuits were becoming available, so that programmes could be transited across countries without interference with their national television facilities, and alternative routes were available for simultaneous programmes. However, all the international circuits were being rented by the minute for each transmission, and it was clear that operational convenience and technical reliability could be greatly improved if these circuits were permanently at the disposal of the E.B.U. A committee was appointed within the E.B.U. to advise the Administrative Council how a permanent Eurovision Network might be achieved, and as a result Stage 1 of the Permanent Network Scheme was put into effect on 1st January, 1962. Stage 1 comprises programme-sound and communication circuits, but Stage 2, comprising the vision circuits, is being held in suspense pending the negotiation of economic long-term rentals. Nevertheless, Stage 1 has made it possible to obtain many practical advantages and, since it has been in effect, traffic has increased at a very encouraging rate. It has also made it possible to put into effect the Daily News-Exchange Scheme, and the transmission of short news-items is becoming a major activity.

The first intercontinental television relay took place in July, 1958, between Europe and Africa, the signals being relayed from an aircraft circling over the Mediterranean Sea, but this achievement was overshadowed in July, 1962, when multiple-origin live television programmes were relayed across the Atlantic Ocean by means of the experimental communication satellite "Telstar I". Since then, transatlantic transmissions have become a commonplace, and early in 1964 the first television transmission between Asia (Japan) and Europe was effected.

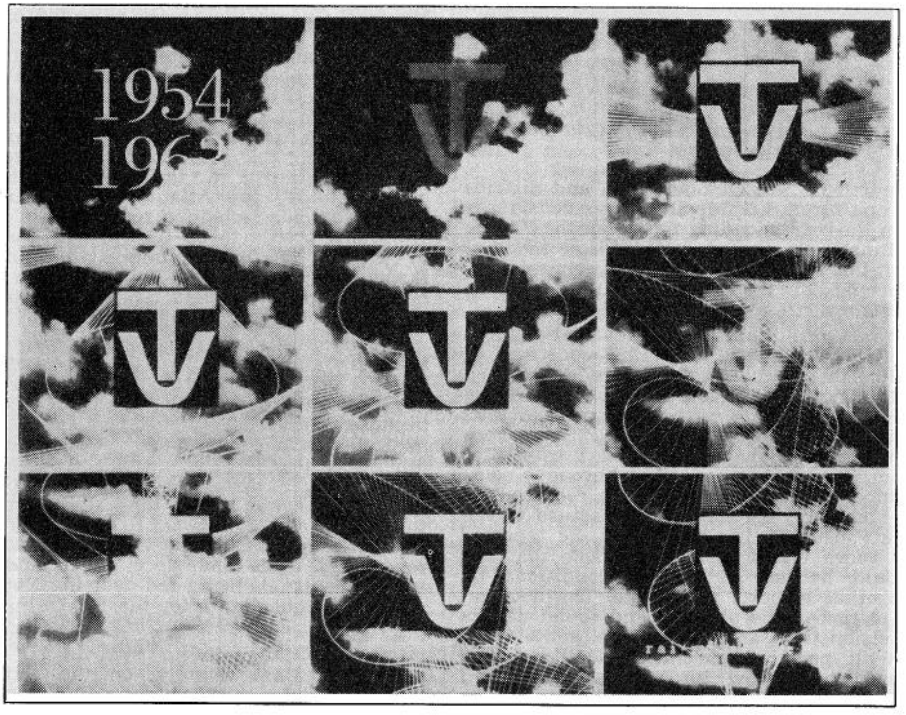
Significant events for Eurovision in 1964

Undoubtedly, 1964 will figure in the annals of Eurovision as the year of the Olympic Games. First came the Winter Games at Innsbruck, Austria, necessitating a very complex television organisation because of their widespread interest throughout the world. During the twelve days of the Games, nearly two hundred programmes were distributed over the Eurovision Network for E.B.U. Members, more than thirteen of which participated in each transmission. In addition the American Broadcasting Company undertook the production of television programmes for the United States and most of these were transmitted over the Eurovision Network to Frankfurt-am-Main for recording, the tapes being then immediately flown to America; other American items were transmitted to Paris or London for retransmission to the United States by satellite. In order to handle this heavy international commitment, the Oesterreichischer Rundfunk constructed a special Master Control Room for the E.B.U. at Innsbruck.

Although the number of television transmissions originating at the Tokyo Olympic Games, which

Continued page 22

Dieci anni di Televisione in Italia



Rai Radiotelevisione Italiana

EUROVISION IN 1964

Continued from page 20.

The television tape-recording facilities in the technical area put at the disposal of the E.B.U. in the N.H.K. Broadcasting Centre in Tokyo. In the centre, wearing a dark suit, is Dr. Aldo Riccomi, who was responsible for all the E.B.U.'s television technical operations in Japan in connection with the Olympic Games.

lasted from 10th to 24th October, 1964, and distributed in Europe for E.B.U. Members was considerably less than the corresponding figure for the Winter Games at Innsbruck, the complexity and the cost of the operation were proportionately immensely greater, because of the great distance between Japan and Europe.

Two main methods of obtaining television pictures from Japan were adopted. The first consisted of tape-recording the pictures of the Games distributed over the Nippon Hoso Kyokai network and flying the tapes to Europe. This method is not nearly as simple as it sounds; the main complications were the fact that the Japanese television uses a 525-line, 60-field standard, numerous synchronous commentaries in different languages were required by the E.B.U. Members, the times of departure of the air-liners left insufficient time to edit the tapes in Tokyo and there was a risk in October that the aircraft would, because of weather conditions, be diverted to other airports in Europe. The decision was taken to record the pictures and sound effects on the television tape, and ten-channel audio tape-recorders, with special synchronising facilities, were designed and constructed for use in Tokyo and Europe for the commentaries. Arrangements were made with the N.H.K. for the provision of a separate Control Room in Tokyo for the E.B.U. and the video and audio tape-machines and the ancillary equipment were installed there. In Europe, Hamburg was selected as the point of reception of the tapes flown from Tokyo and technical arrangements were made for converting the pictures at Hamburg from 525 to 625 lines and for distributing them to all E.B.U. Members using that standard; separate transmission of unconverted 525-line pictures to Paris and London was arranged, for local conversion to 819 and 405 lines. The audio tapes were replayed at Hamburg and the ten commentaries, synchronised with the pictures, distributed in the same way as for an ordinary multilateral transmission from Hamburg. However, it was necessary to make provision for the diversion of the aircraft, and it was considered that in that case the aircraft would probably land either in København or at Frankfurt-am-Main, so emergency facilities for replaying the tapes were provided in København and Wiesbaden, although the 525-line signals still had to be routed to Hamburg for conversion. If the aircraft had to land elsewhere, it would be necessary to convey the tapes by any available method to one of the three places where replay facilities were available.

About two months before the beginning of the Tokyo Games, it was confirmed that the "stationary" satellite Syncom III would be in a position to transmit television signals from Japan to the west coast of the United States during the Olympic Games. This opened up new possibilities, because, whereas the method described above made it possible to show Tokyo pictures in Europe during the early evening of the day after the events, it was possible by using Syncom III to show the picture in the late evening of the same day. To do this, it was necessary to transmit the pictures received on the west coast of the United States across Canada to Montreal, where they were recorded on tape. The tapes were loaded into a jet aircraft chartered by the E.B.U. and immediately flown to Hamburg, for distribution as in the case of the tapes flown from Tokyo direct. However, the satellite facility made no provision for multiple commentaries and these were transmitted sequentially over four telephone circuits from Tokyo to Hamburg, where they were rerecorded, during the time taken for the chartered aircraft to fly the Atlantic Ocean. Arrangements were also made for edited recordings of particularly important events to be transmitted from Montreal to Andover (Maine) for immediate transmission to Europe by the satellite Relay I when a pass occurred at a convenient time, although it was no longer officially available.

The arrangements for conveying vision and sound tapes by air from Tokyo to Europe worked very well in practice, although on seven of the fifteen days the air-liner arrived late; on two occasions, because of diversions, the tapes had to be replayed in København instead of Hamburg, and on two other occasions at Wiesbaden. The signals were distributed over the Eurovision Network to never fewer than twenty-one television services within the E.B.U. and to two O.I.R.T. members. Provision had been made also to fly to Europe, with the E.B.U. recordings, tapes made specially for individual services, the signals being fed over the Network to the services in question after the E.B.U. material.

As far as the pictures were concerned, the transmission by the satellite Syncom III was highly successful. Unfortunately, on the sixth day, the submarine telephone cable between Japan and Honolulu, upon which the E.B.U. was relying for transmitting the commentaries in the various languages, broke down. It was restored four days before the end of the Games, but in the meantime considerable difficulty had been experienced with the sound; the only alternative, the long-distance radiotelephone circuits, were already almost fully allocated to press and sound-broadcasting traffic, and in any case their technical quailty is inferior. However, a total of nearly thirteen hours of programme was transmitted by way of Syncom III and the aircraft chartered by the E.B.U. to fly the tapes daily from Montreal to Europe, where the signals were distributed over the Network to twenty-two E.B.U. services and four O.I.R.T. services. The satellite Relay I was made available on six occasions for transmitting to Europe shortened versions of the programmes received by way of Syncom III.

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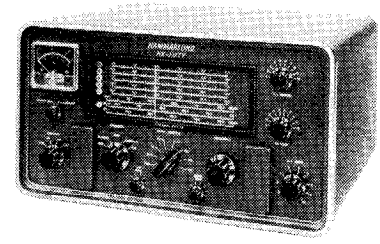
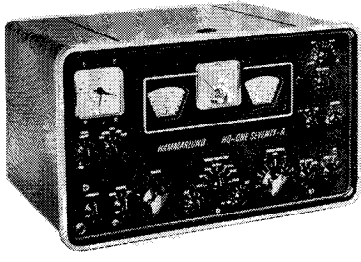


HQ-170A RECEIVER



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THE WORLD OF RADIO BROADCASTING

By Roger Legge, U.S.A.

Broadcasting stations are assigned specified bands for operation, as follows:

LONG WAVE (Low Frequency)		MEDIUM WAVE (Medium Frequency)	
Kilocycles	Meters	Kilocycles	Meters
150–285	1053–2000	525–1605	187–571

SHORT WAVE
Tropical Broadcasting Bands

Kcs.	Megacycle Band	Meter Band
2300–2495	2	120
3200–3400	3	90
4750–5060	4	60

HIGH FREQUENCY BROADCASTING BANDS

Kcs.	Megacycle Band	Meter Band
3900– 4000	3,9	75
5950– 6200	6	49
7100– 7300	7	41
9500– 9775	9	31
11700–11975	11	25
15100–15450	15	19
17700–17900	17	16
21450–21750	21	13
25600–26100	25	11

Some broadcasting stations operate outside of the assigned bands, mainly near the edges of these bands.

The *Long Wave Band* (used in Europe) and the *Medium Wave Band* (used worldwide) are used mainly for domestic broadcasting, but are used also for some international broadcasting to adjacent countries. Although long and m. w. stations are normally heard only for moderate distances, long-distant reception is possible over dark transmission paths, mainly during the fall, winter and spring months in the reception area.

The *Tropical Broadcasting Bands* are assigned for use for *domestic* broadcasting in tropical areas, where high atmospheric noise levels limit the service area of medium wave stations. DX reception on these bands is best when the transmission path between the transmitter and receiver is all or mostly in darkness. These bands are used mainly by stations in Latin America, Africa, South and Southeast Asia, and Oceania.

The *High Frequency Broadcasting Bands*, between 3.9 and 26.1 megacycles, are used for both international and domestic broadcasting. These bands are allocated for worldwide use, except that the 3.9 and 7 mc. bands are not allocated for broadcasting in the American area. Also, the 3.90 to 3.95 mc. portion of the 75 meter bands is used only in Asia and Oceania.

Reception conditions on these bands vary according to the time of day and season of the year. Most of the international broadcasting stations make seasonal changes in frequency usage, mainly on the first Sunday of March, May, September and November. In addition, frequency and time changes are made at other times during the year, due to interference, change of program times, addition of new transmitters etc. A large percentage of the domestic broadcasting stations operating in the high frequency bands do not make seasonal frequency changes, but some, particularly the stations in India, Pakistan, USSR and South Africa do make seasonal shifts.

The *3, 6 and 7 mc. bands* are best for distant reception when the transmission path is all or mostly in darkness, and during fall to spring months in the reception area, when the local atmospheric noise level is lowest. Reception at any point is therefore best from the east from shortly before sunset until several hours before dawn, from the west between late evening and dawn, and from the north and south at any time during the night hours.

The *9 and 11 mc. bands* are best for long distant transmission on dark or partially dark paths, and for medium distances during daylight hours. In Europe and North America, night reception during the winter months is mainly from stations to the south during the present low phase of the sun spot cycle, since these bands are then too high for satisfactory east-west and west-east transmission.

The *15 and 17 mc. bands are*, in general, best during periods of daylight on the transmission path. However, night paths are open during the summer months, also north-south and south-north paths during the fall and spring.

The *21 and 25 mc. bands* are primarily daylight paths, and are best during winter months. There is practically no 25 mc. operation during the present low part of the solar activity cycle.

Shortwave Broadcasting Listening.

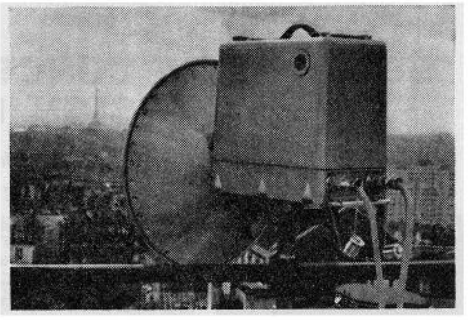
The first requirement for obtaining satisfactory reception of shortwave broadcasting stations is the availability of a suitable receiver. Receivers vary from small portable transistor sets to large communications type receivers. If you are purchasing a new receiver, the type to get will depend on the intended use and the amount which you are able or willing to spend.

Adequate band coverage is one of the primary requirements of a good receiver. Coverage of the 6, 7, 9, 11 and 15 mc. bands should be included, with the 17 and 21 mc. bands desirable but less necessary. If you live in a tropical area where local stations operate in the Tropical Broadcasting Bands, inclusion of the 3 and 4 mc. bands is also essential.

Good sensitivity and selectivity are needed in order to permit receiving desired stations with adequate strength and to separate them from other stations on closely adjacent frequencies. Since channels are spaced at 5 kc. intervals, good selectivity is essential in these days of crowded conditions on the broadcasting bands. The best way to determine whether a receiver has these characteristics is to try it out and observe the results obtained.

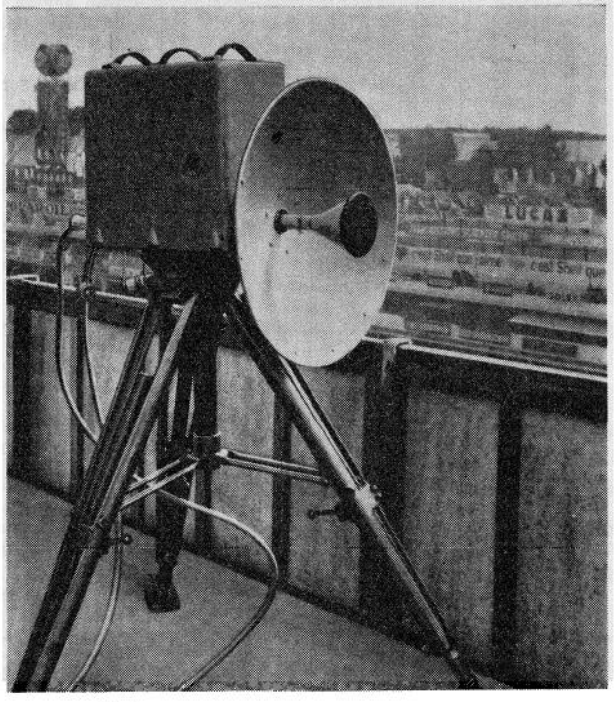
Band-spread is a further essential to look for in a receiver. Since there are from 40 to 70 five kc. channels in each of the short wave broadcasting bands, the spreading of each band over an adequate dial space is desirable, in order to facilitate locating stations on the dial, tuning them in properly, and retuning to a station on a latter date. Calibrated band-spread is best. Some sets have electrical band-spread, distributing a band over a separate dial, usually with a 1-100 scale, facilitating tuning of stations once the dial has been calibrated.

Televisions of : **FRANCE**
ENGLAND
SPAIN
YUGOSLAVIA
PERU



have adopted the mobile reporting microwave relay

TV 11



- 625 line TV signals (CCIR standard) either in black & white or colour, with or without the associate sound
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SOME FACTS CONCERNING THE WORK OF INTERVISION IN THE LAST YEAR

By Aleš Suchý Head of the Intervision Programme Coordination Centre.

Ales Suchy

The last year has been marked by a permanent increase of the scope of work of Intervision both inside the extensive Intervision network and between Intervision and Eurovision.

In May, 1964, the Intervision member countries started a regular exchange of topical news items over the television network which proved successful, being of great importance for the timely delivery of information to TV viewers. Naturally, this exchange requires a perfect organization, high degree of discipline from the part of all participants and a good technical preparation. Considered must be also the big distance among the individual member organizations participating in the news exchange, i.e. among Moscow, Berlin, Prague, Budapest, Bucarest and Sofia.

The steady growth of television programmes transmitted over the common network is best shown by the following data:

Year	Number of broadcasts	Duration (hours)
1962	295	1018
1963	474	1669
1964 (first half)	423	1581

Daily average of all broadcasts:

1962	0.81
1963	1.21
1964 (first half)	2.32

Daily average duration of broadcasts including preparation time:

1962	3.45
1963	3.5
1964 (first half)	3.75

The Intervision network, serving the exchange of television programmes, is being expanded and improved steadily. Temporary and lowquality installations are replaced by new and modern ones. Provision of a sufficient reserve is also not forgotten. Putting into operation of the Moscow—Katowice and Prague—Berlin coaxial cables undoubtedly played a big role in the improvement of the level of the whole network.

The Intervision Technical Commission is busily preparing such a perspective expansion of the Intervision network which would enable the international exchange of television programmes independent of the national programmes of the individual member countries.

Also the exchange of programmes between Intervision and Eurovision is steadily increasing as witnessed by the following data:

Number of broadcasts relayed

Year	From Eurovision to Intervision	From Intervision to Eurovision
1962	37	—
1963	72	36
1964 (first half)	108	44

The last meeting of OIRT and EBU representatives held in Helsinki recommended the extension of the mutual programme exchange between both organizations. In the centre of attention were artistic programmes, relays of concerts of symphony music and variety programmes followed by relays from museums, galleries and exhibitions.

In 1965 on the occasion of the 20th anniversary of the United Nations Organization a whole series of artistic broadcasts prepared by the individual OIRT or EBU members or groups of members will be realized.

In the framework of OIRT and EBU also song festivals are planned which will certainly arouse a considerable interest among viewers of both organizations.

The cooperation in the field of sports relays is being continued, and joint relaying of all important events in the sporting life is introduced.

Regular holding of consultations between the permanent bodies of both organizations and mutual help in the solution of questions, interesting for members of both organizations have been recommended.

A wider exchange of news items between Intervision and Eurovision members on the basis of a direct exchange over the network is also planned.

Contacts in the juridical field have been also established.

In general it can be said with right that Intervision has become a clear notion and asserted itself with television viewers.

Today Intervision programmes bring a variety of entertainment and education and represent a practical realization of the noble idea of cooperation among all nations, and peaceful coexistence on the whole world.

We want your help

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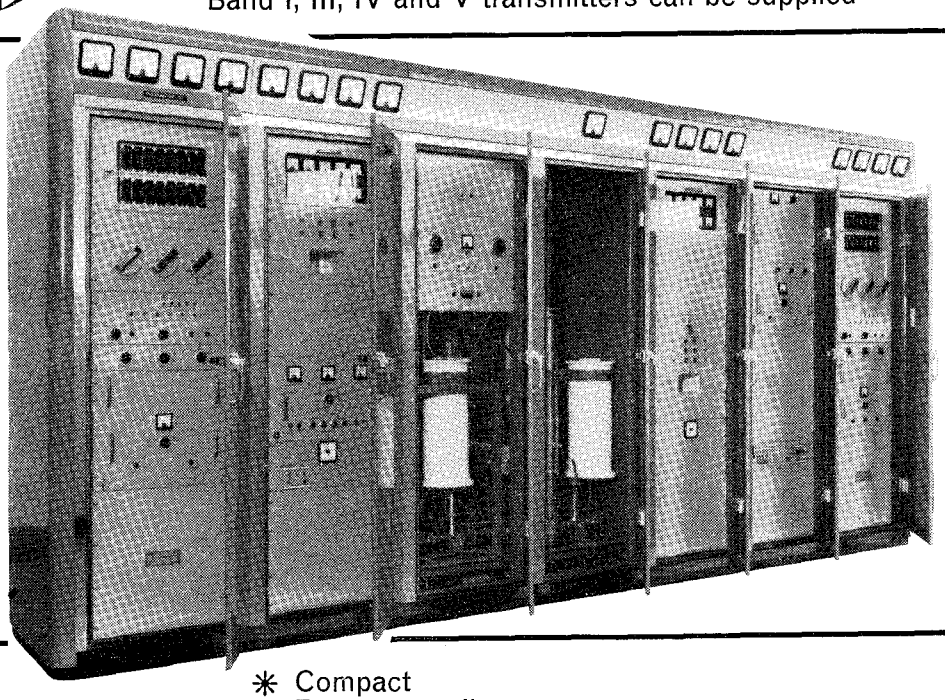

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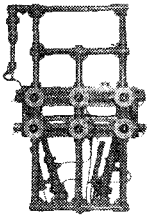

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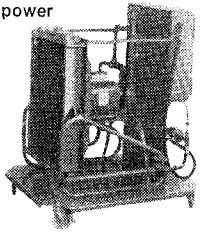

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COLOUR-TELEVISION STANDARDS FOR EUROPE

by Georges Hansen

Director of the Technical Centre of the European Broadcasting Union

Vice-Chairman of C.C.I.R. Study Group XI (Television).

No conclusion was reached in 1964 as to the choice of a Colour Television System for Europe. This does not mean that much effort has not been devoted to solving this problem which is of course a complex and delicate one and has far-reaching consequences. I reported in the 1964 edition of the World Radio and TV Handbook on the work undertaken by the E.B.U. which, in November, 1962, formed an Ad-hoc Group composed of specialists from E.B.U. Members, Telecommunication Administrations and radio manufacturers effectively engaged on tests of colour-television systems, the countries represented being France, the Federal Republic of Germany, Italy, the Netherlands, Switzerland and the United Kingdom. The Chairman of the Group is Professor R. Theile, Director of the Institut für Rundfunktechnik, Munich.

Based on the work undertaken since its creation until the middle of October, 1963, the Ad-hoc-Group published at the end of 1963 a 40-page report entitled "Report of the E.B.U. Ad-hoc Group on Colour Television" which gives the results of the comparison of the three colour-television systems taken into consideration, namely the NTSC, SECAM and PAL systems. The work of the Ad-hoc Group is summarised in a more detailed, 163-page, document also published by the Group and entitled "Record of investigations undertaken by the E.B.U. Ad-hoc Group on Colour Television". These documents were submitted to the meeting of the Colour-Television Sub-committee of C.C.I.R. Study Group XI, which met in London from 14th to 25th February, 1964.

No conclusion was reached at that meeting concerning the choice of a colour-television system for Europe and the matter will have to discussed at the meeting of C.C.I.R. Study Group XI, which will open in Vienna on 24th March 1965. The Colour-Television Sub-committee drew up a report on the comparison of the competing systems, based to a very large extend on the report of the E.B.U. Ad-hoc Group. Let us say in brief that in many respects the qualities of the systems do not differ markedly, although the actual importance attached to each of these qualities may differ depending on the interests of the authority concerned. The NTSC system, which has been used in the U.S.A. for more than ten years, would benefit, particularly in the fields of receivers, from the industrial experience there. The cost of the receivers would be slightly less than for the PAL and SECAM systems. The NTSC system is better than the PAL or SECAM systems in respect of compatibility, that is the quality of the picture as received on normal black-and-white receivers. The PAL system is less sensitive to differential-phase distortion than the NTSC. Recordings may be made relatively easily on this system. The SECAM system is almost insensitive to changes of phase and permits recording and reproduction of pictures on ordinary monochrome video tape-recorders. For transmission over long radio link chains, the PAL and SECAM systems require less severe equipment-performance tolerances than does the NTSC.

A demonstration was given by the E.B.U., during the meeting of its Technical Committee in April, 1964, of the transmission of colour-television programmes over radio links in Europe. Programmes were transmitted from Rome using the PAL system, from Paris using the SECAM system and from London using the NTSC system. The demonstration was highly successful and gave an idea of what Eurovision may look like when colour television is introduced in Europe. It may be mentioned here that this introduction will take place in some countries as early as 1967. In the United Kingdom notably, a regular colour-television service will start early in 1967, according to a statement by the Postmaster General in the House of Commons on 14th April, 1964, this statement being based on a recommendation of the Television Advisory Committee.

It appears therefore that the last opportunity to reach a European agreement on colour-television standards will be at the C.C.I.R. Study Group XI meeting in Vienna from 24th March to 7th April, 1965. Steps have been taken to provide the best possible conditions for making a choice then. A new programme of work and tests has been arranged by the E.B.U. Ad-hoc Group. A complementary report to the one issued in 1963 will be prepared and submitted to the C.C.I.R.

It is important that the same colour-television standards be adopted in Eastern and Western Europe and since 1963 an exchange of information has been arranged between the E.B.U. and O.I.R.T. on the studies and trials of the colour-television systems. This cooperation has been further strengthened. Delegates from the E.B.U. took part as observers in a meeting of the O.I.R.T. Study Group III in Sofia on 18th August, 1964. Conversely, observers from the O.I.R.T. were invited to a meeting of the E.B.U. Ad-hoc Group in December, 1964 at Hilversum, and a joint meeting of the E.B.U. and O.I.R.T. experts is planned for the beginning of 1965. An important series of demonstrations was given in London from 26th to 29th October, 1964, to which demonstrations were invited not only the Members of the E.B.U. Ad-hoc Group, but also O.I.R.T. experts. It is hoped that all these coordinated efforts will make it possible to agree on a common colour-television system for all the countries of Europe at the time of the C.C.I.R. Study Group XI meeting in Vienna.

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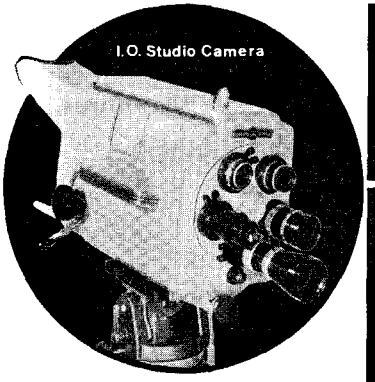

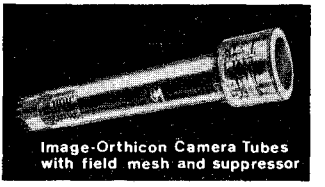
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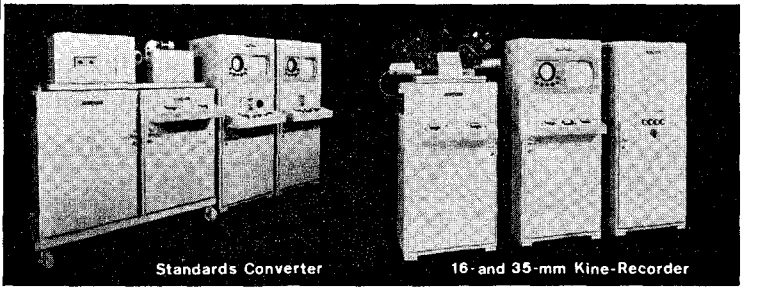

IN TV-STUDIOS THROUGHOUT THE WORLD

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Bussum	Raisting
Caracas	Rome
Cologne	Saarbrücken
Copenhagen	Salisbury
Curacao	Santiago
Frankfurt	Sydney
Genf	Stockholm
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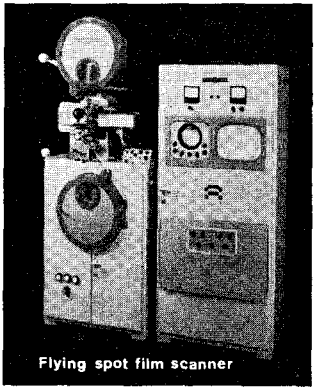
Hamburg	Tampico
Hannover	Turin
Helsinki	Vienna
Hobart	Wiesbaden
Innsbruck	Zürich


Flying spot film scanner

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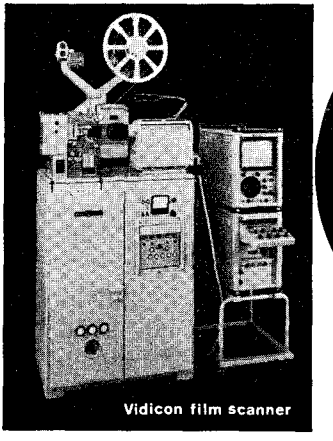
Vidicon film scanner

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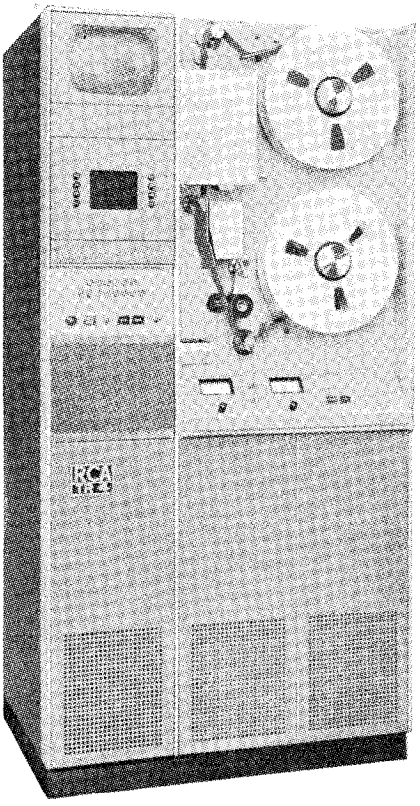
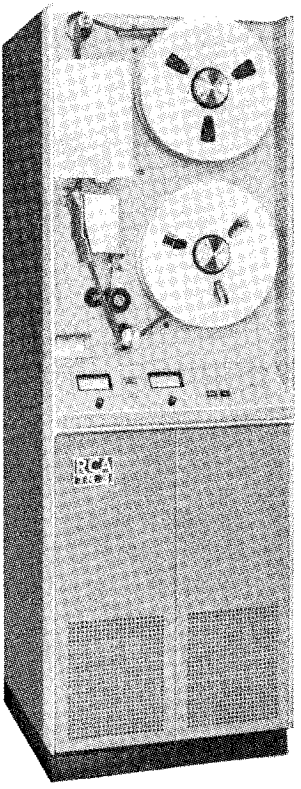


NEW TR-4



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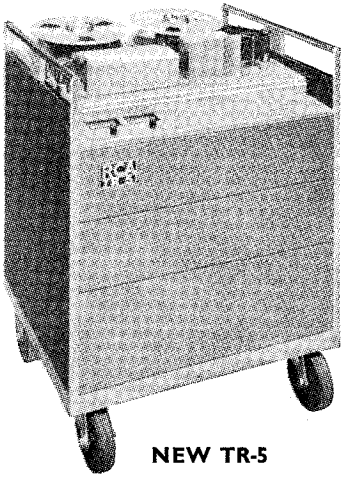
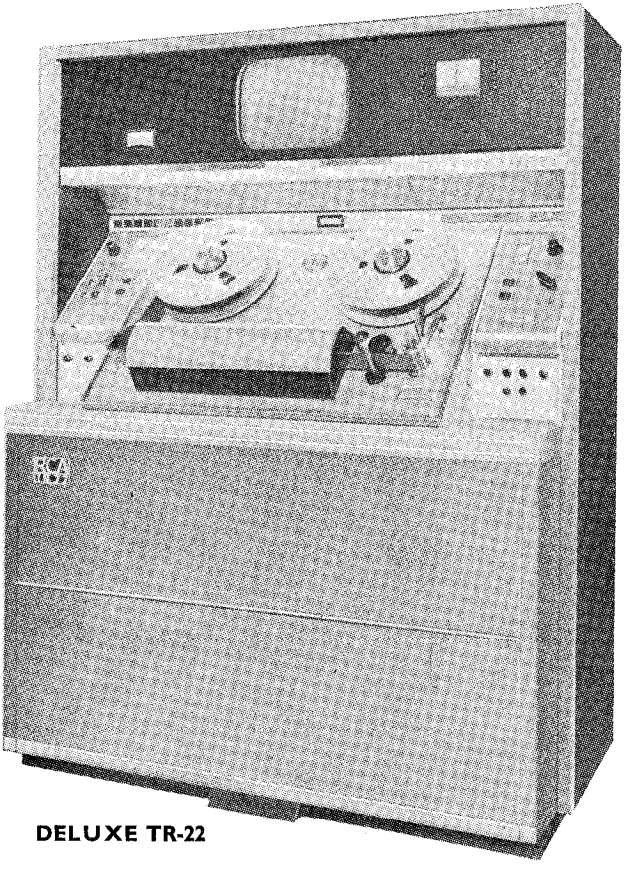


NEW TR-5



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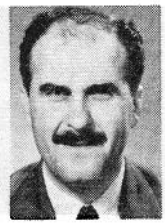
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1) Miss Dorothy Logan, Announcer Overseas Sce's, who introduces "Short Wave Listeners Corner" in the GOS – 2 John Wing, Newsreader G.O.S. – 3) Miss Kay Sharman Announcer, Overseas Sce's – 4) H. E. Arni, Prgr. Asst. Finnish Sce – 5) Roger Collinge, Announcer, Overseas Sce's – 6) Maurice Latey, Head East European Sce's – 7) Edw. W. Ashcroft, Commentator, European Sce, English section – 8) M. Bibi, Newsreader, Arabic Sce – 9) M. Bishuty, Arabic Sce – 10) H. Karmi, Arabic Sce – 11) Daw Hla Hla Winn, Burmese Sce – 12) Claude le Saché, European Sce, French section – 13) Eva Sachs, German Sce – 14) R. O'Rorke, Head, German Sce – 15) F. Rentoul, Hungarian section – 16) A. Lawrence, Italian section – 17) G. Beltran, Latin American Sce – 18) J. Peirano, Latin American Sce, producer of "Actualidades" – 19) A. Ali, Pakistan section – 20) J. M. Zaranski, Polish section – 21) Rosomak, Polish section – 22) J. Manye, European Sce, Spanish section – 23) S. Mrmak, Yugoslav Sce.

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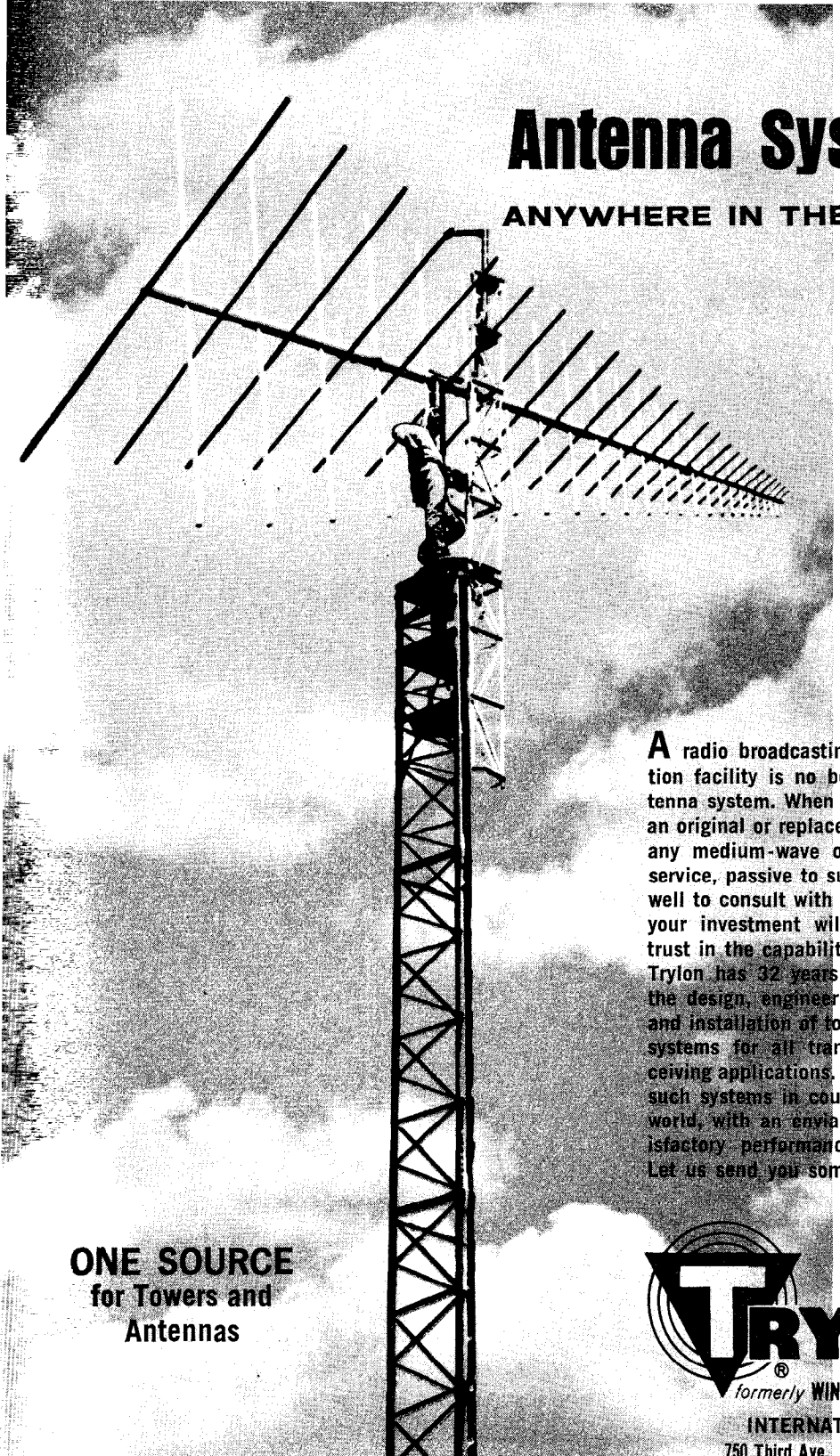

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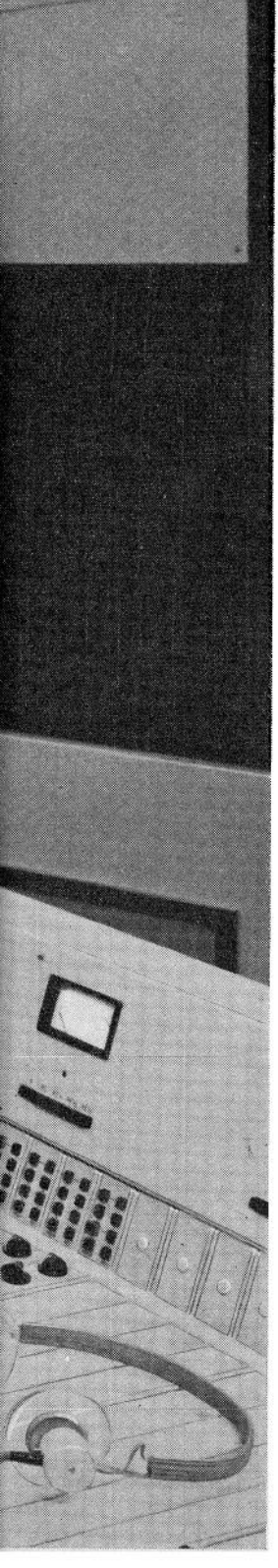

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INTERFERENCE, JAMMING - AND YOU

by S. B. Duke, President of Radio Canada Shortwave Club

Reading left to right, S.B. (Pip) Duke, Supervisor of Engineering Services, CBC International Service and the President of the Radio Canada Shortwave Club. Simone Rubal, Club Secretary and Duncan Nicholson, Assistent Supervisor of Engineering Services, CBC International Service and Vice-President of the Club.

By interference, we usually mean man-made noise which will detract from the intelligence of the desired signal. But in this article, we will also discuss other types of interference encountered in shortwave reception. For example, static (atmospherics), extra-terrestrial or cosmic noise and — jamming.

Perhaps the most common types of interference (known as QRM) on the international shortwave broadcasting bands today are: —

Heterodynes
of low or high frequency depending upon the audio note (whistles) produced by the beating together of the carrier waves of the desired station and the interfering station. The heterodynes, or whistles referred to here, are usually of constant pitch.

Modulation
spread (or splash) causes adjacent-channel interference when it is heard above the program of the desired station. Due to the current seriously overcrowded condition of the international shortwave broadcast bands, radio stations are forced to operate very near—or even on each others' frequencies. Since the Administrative Radio Conference, Geneva 1959, notifications of frequency usage are accepted by the International Frequency Registration Board with only 5 kc/s separation. Of course such circumstances require increased selectivity in receiving equipment if the various signals are to be received without undue mutual interference. The less selectivity a receiver possesses, the less ability it has to separate these signals sufficiently to provide clear reception. The decision to adopt a 5 kc/s separation principle was no doubt due to the chronic overcrowding of the shortwave broadcast bands and of course many stations were already operating on frequencies 5 kc/s (or less) from their neighbours on the tuning dial. Therefore, to recapitulate, **adjacent-channel interference** is due to the modulation of one station spilling over onto the program of another station (or stations) operating 5 kc/s away.

Co-channel interference can be recognized by the presence of two intelligible signals on the same frequency when each signal is approximately the same strength. Sometimes, when one of these signals is much stronger than the other, it will completely, or almost completely blanket its unwilling bedfellow. The main contributing factor to **co-channel intereference** is, once again, the serious overcrowding of the international shortwave broadcast bands. Insufficient geographical separation between mutually interfering stations, off-beam antenna radiation and insufficient geographical separation between target areas are other factors contributing to co-channel and adjacent-channel interference.

Code
signals on or near the operating frequency of a broadcasting station often cause interference which an experienced shortwave listener will be able to recognize as morse (CW), facsimile, radio-teletype (RTT) and so on. Sometimes, this interference at the receiver may be caused by a harmonic of the fundamental (or operating) frequency of the interfering station.

Noise
can be sub-divided into two types, atmospheric, (extra-terrestrial or natural noise) (QRN) and man-made noise such as car ignition, starter lights, dirty commutator brushes etc., (QRM). There are two types of natural noise, atmospheric and extra-terrestrial (sometimes called cosmic or galactic noise). Atmospheric noise is the most erratic. It varies with the time of day, season of the year, the weather, and increases the nearer one gets to the equator. The crashing noise heard in a receiver, resulting from a lightning flash, is a good example of this type of noise. Extra-terrestrial or galactic noise is unlikely to be heard below about 18 or 20 Mc/s. It sounds like a steady hiss and increases rapidly during some types of solar disturbance.

But the noise most often heard by the shortwave listener is that caused by lightning flashes in our atmosphere. Don't forget, a lightning flash, is a form of transmitter and propagates an electric impulse (similar to a radio wave) over great distances. A large flash in West Africa may well add to the background noise, and so interfere with reception in Europe.

While we are discussing this problem of interference, it will be appropriate to mention the information most useful to shortwave radio station engineers and which should be included in any reception report:

I identify all types of interference—first by type such as CW, jamming, modulation splash, heterodynes and so on.
II identify the source of the interfering signal, call-sign, language of announcements, nationality of the station, interval signal etc.
III operating frequency of the interfering station.
IV the degree (or strength) of the interference in terms of degradation of the required signal. Here the SINFO code is very useful. The judgement of the operator or shortwave listener is necessarily subjective in this assessment.

There is another form of interference encountered in the international shortwave broadcast bands and that is JAMMING.

Jamming means the deliberate interference with a transmission by imposing on it another signal to prevent reception or to make the transmission unintelligible. Fundamentally, jamming interference is

(Continued page 38)

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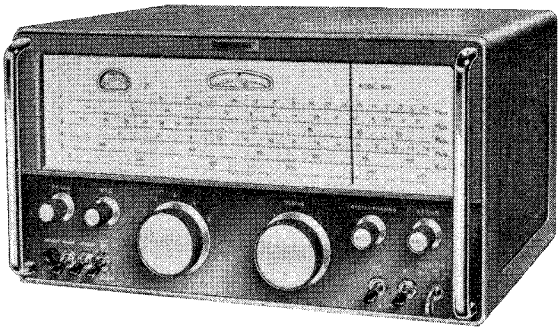

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a broadcast or a number of broadcasts of noise signals, perhaps a tape recording of a diesel motor. It is easily recognizable by the "harsh roar" characteristic. The interference (QRM) from such transmissions may be either ADJACENT CHANNEL or CO-CHANNEL. If of the adjacent channel type, it is called "JAMMER SPLASH". Sometimes, jamming transmissions are sufficiently broad, or wide-band, to cover more than one channel.

What can be done to remove or suppress jamming? First, we should be quite clear about one thing. The possibility of ending the effects of jamming by various new techniques and vague panaceas is misleading. Jamming can only be stopped by switching off the jamming transmitters. This will probably be effected through political rather than technical action. For, as new or improved methods are developed to minimize the effects of jamming, so improved methods of jamming are also found. Some of the technical ways to combat jamming include the use of more powerful transmitters to beam the program into the target area, the greater use of overseas rebroadcast bases located nearer the target area, the use of a greater number of transmitters carrying the same program—even "barrage" transmissions of fifteen or twenty senders, each on a different frequency. Then there are improvements to directive antenna systems—so narrowing the beam and improving directivity and gain. Speech clipping techniques are also used to provide the maximum amount of intelligence under adverse reception conditions in the target area.

At present, the international shortwave broadcast bands are chronically overcrowded and the situation is now acute due to the current sunspot minimum conditions. Many users of the higher frequency bands such as 13 and 16 meters must now make greater use of the 19, 25 and 31 meter bands and even lower HF bands during hours of darkness. It is generally conceded that the need for so many frequencies to carry a particular program would diminish if so many channels were not rendered unusable by jamming or jammer splash.

So far as jamming interference is concerned, there is little that the average shortwave listener can do to rectify the situation. It is true that shortwave receiving and monitoring stations operated by the professional shortwave broadcasting organizations possess equipment which can do much to remove the degrading effects of jamming from a signal. But it is quite complex equipment and highly expensive. The use of directional receiving antennas helps to reduce this type of interference but again, such antenna arrays are quite large and very expensive. A very selective receiver is useful, especially if it has a selectivity switch with a number of positions so that the band-pass can be varied.

However, it will take much more than the equipment available to the average shortwave listener to overcome the effects of jamming or jammer splash. There must be a realistic re-appraisal of the whole situation by jammer and jammed. That there already has been much progress in this direction is clear to anyone listening regularly on shortwave. A dramatic reduction in jamming of western broadcasts on the shortwave bands became apparent at the end of June 1963. From that time, jamming of western broadcasts has very much diminished and nowadays, what jamming remains is directed mainly against a very few shortwave broadcasting organizations. But there is a long way to go yet. However, with goodwill and mutual trust it should still be possible for broadcaster and listener to communicate together in dignity and peace.

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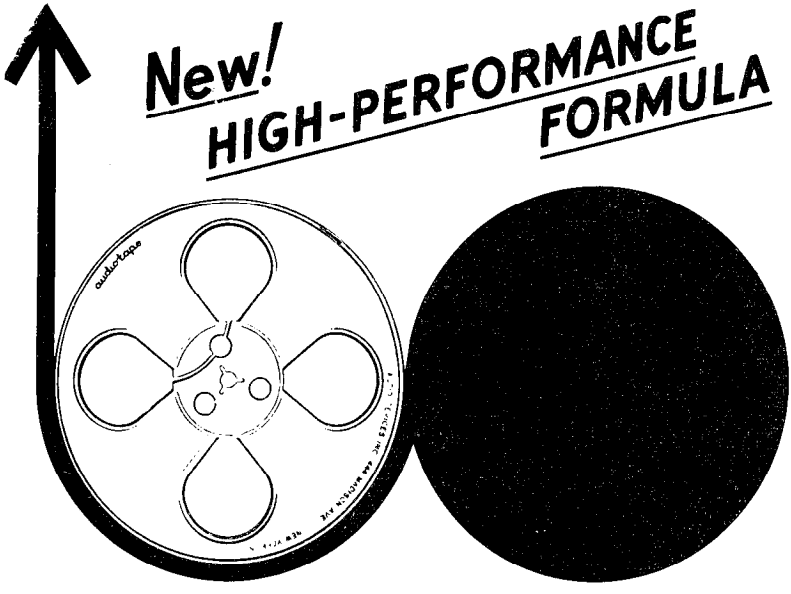

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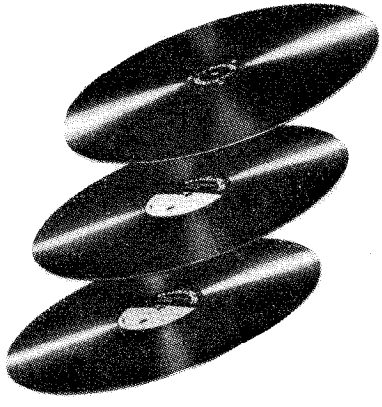

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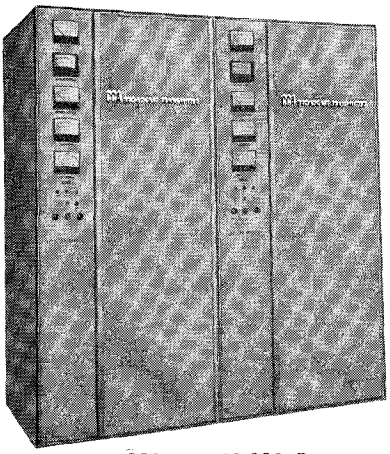

CCA AM - 10,000 D

The CCA AM-10,000D, 10 KW AM broadcast transmitter incorporates features that are standard in all CCA AM transmitters. These include:

Silicon rectifiers with minimum of 200% safety factor; 300% reserve in air cooling; minimum tube costs; low distortion high level plate modulation; automatic overload recycling; minimum floor space; full accessibility with hinged meter panels.

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- SILICON RECTIFIERS
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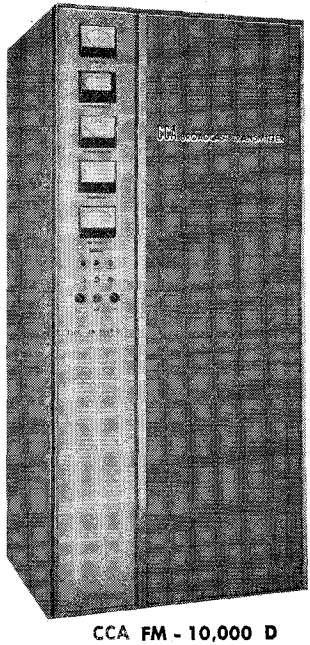

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SOLAR ACTIVITY IN 1965

by Professor M. Waldmeier, Zürich

Solar activity strongly influences the ionosphere and the high frequency radio communications. The mostly used index of the solar activity is the so-called sunspot-relative-number. This index is known for more than two centuries. It shows the well-known variations in solar activity with a period of about 11 years. For practical use the daily relative-numbers for the expired month as well as predictions for the coming six months are emitted by the Swiss Shortwave Service. The present emission-time-table valid till May 2nd, 1965 is as follows:

Destination of Emission	Time of Emission[1])		kc
In English:			
Great Britain	12.55	U.T.*	7110, 9665
North America	09.10p.m.	E.S.T.*	6080, 6105, 9535
	07.55a.m.	P.S.T.*	15305
Japan, China	08.10	U.T.*	9670, 11865, 15305
Australia, New Zealand, SE-Asia	09.55	U.T.*	15305, 17820, 21520
India, Pakistan	14.10	U.T.*	9535, 11865, 17795, 17845
Middle and Near East	15.55	U.T.*	9535, 9665, 11865
Africa	19.40	U.T.*	9595, 9665, 11715
In Spanish:			
Spain	21.25	U.T.*	7220, 9665
	11.40	U.T.**	7110, 9665
South America	00.55	U.T.***	6165, 9535, 9655, 11810
Centr. America	03.55	U.T.***	6120, 6165, 9535, 9655

[1]) **Dates of Emission:** * Sat. 7/11, 5/12 1964, 9/1, 6/2, 6/3, 3/4 1965. — **) Sun. 8/11, 6/12 1964, 10/1, 7/2, 7/3, 4/4 1965. — ***) Night from Sat. to Sun.

The relative-number has decreased rather regularly since the high maximum in 1957. The annual means are as follows:

1957 190, 1958 185, 1959 159, 1960 112, 1961 54, 1962 38, 1963 28.

The mean value for 1964 will be around 8. Actually sunspot-activity is at its minimum. Long before the old cycle came to its end, spots of the new cycle have appeared. The first one was a small one-day-spot on August 28, 1963. Up to the end of 1963 three more and larger spot-groups of the new cycle have appeared. During 1964 the number of the groups belonging to the old cycle was steadily decreasing, whereas the new cycle spots were increasing in number. In the last quarter of 1964 old and new cycle spots will be about equally frequent and this marks the epoch of the minimum of the sun's activity. As the old and the new cycle are strongly overlapping, in no month the sun will be completely quiet. The lowest smoothed monthly relative-number will be about 7. From the beginning of 1965 the relative-number is to be expected to increase again, but at a low rate. From about 8 at the beginning it will rise to about 18 at the end of the year. This means that the conditions in high frequency radio communications practically will be the same as in 1964. Some years ago the two years 1964 and 1965 have been declared as the years of the quiet sun. This interval has been well chosen, as the minimum of the sun's activity comes just in the middle of it.

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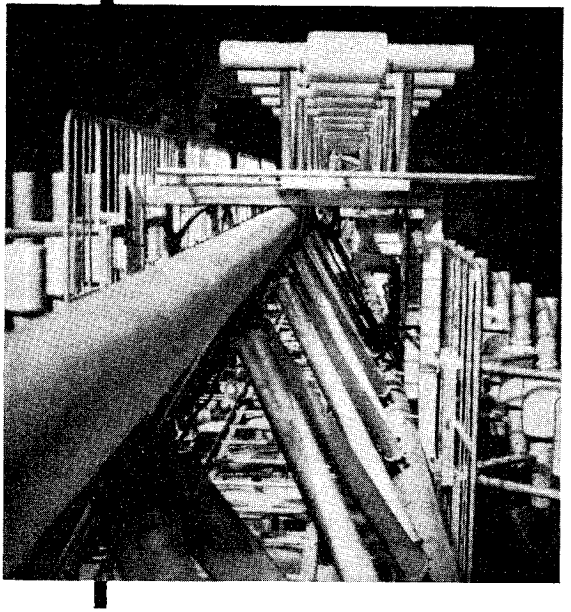

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WORLD COUNCIL OF CHURCHES

The Rev. C. Michael de Vries, Secretary for Work in the Field of Broadcasting, Dept. of Information. Addr: 150, Route de Ferney, 1211 Geneva 20, Switzerland.

The Lutheran World Federation. Same address. The addr. of the Lutheran World Federation Broadc. Sce. is P.O. Box 654, Addis Ababa, Ethiopia – Dir. of Broadc: Rev. S. Aske, Ph. D. – Public- occasional newsletters.

ROMAN-CATHOLIC

Pontifical Commission for the Communications Media.

Addr: Palazzo S. Carlo, Vatican City State.

Pres: Archbishop of Lacdicea in Syria the Most Reverend Martin J. O'Connor.

UNDA: Association catholique internationale pour la Radiodiffusion et la Télévision (International Catholic Organization for Broadcasting and Télévision).

Protector: Bishop of Lausanne, Genève and Fribourg, Mgr. François Charrière, Fribourg, Switzerland.

Secretariat General: Rue de Romont 5, Case Postale 211, 1701 Fribourg, Switzerland.

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Pres: Mgr. J. Haas, Lausanne, Switzerland. Consultative status at UNESCO.

Secretariat for Latin America: 385, Rua São Clemente, Rio de Janeiro. Dir: Miss Marina Bandeira de Carvalho, Rio de Janeiro, Brazil.

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Ordinary members: Germany, England, Austria, Belgium, Scotland, Spain, France, Ireland, Italy, Luxembourg, Monaco, Netherland, Switzerland, Vatican State.

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Corresponding members: Finland, Norway, Dutch Guiana, Greece, Egypt, Morocco, Tunisia, Angola, Mozambique, Basutoland, Hong-Kong, Tasmania, India, Pakistan, Lebanon, Iraq, South Korea.

UNDA-Revue: French and English.

UNDA-Nouvelles: French and English editions.

The Secretariat for Latin America publishes a monthly publication by the name of "Informe de UNDA América Latina".

RELIGIOUS SOCIETIES PROTESTANT

EUROPE:

IKOR (Ecumenical society): Interkerkelijk Overleg in Radioaangelegenheden, Hilversum, Borneolaan 27.

NCRV, Nederlandsche Christelijke Radio Vereeniging, Schuttersweg 8, Hilversum.

VPRO, Vrijzinnig Protestantse Radio-Omroep, Hilversum, Holland.

Radio Reveil, Via Tesserete 51, Lugano.

NOREA: Nordic Radio Evangelistic Association. In connection with Norwegian Lutheran Mission. Cooperating with Trans World Radio, Monaco. Broadcasting over R. Monte Carlo. (See Norway).

IBRA Radio Mission, Box 821, Stockholm 1, Sweden. Memberorganization: IBRA Radio Federation is an intern. fed. of listeners. (See Sweden).

AFRICA:

The Federation of Churches (CENTAVEP) in Yaounde, Cameroon. B.P187 A Ravemcco related agency and a function of the Cameroon Federation of Churches.

AMERICA:

National Religious Broadcasters, an association of Protestant national and intern. broadcasters on radio and tv. Pres: Dr. E. R. Bertermann, 210 North Broadway, Saint Louis 2, Missouri.

World Conference on Missionary Communications or Intern. Christian Broadcasters organized in 1954 as an agency encouraging a continuing dialogue between missionary radio and tv agencies in every area for mutual and individual improvement, securing a greater impact in communicating the Gospel of Jesus Christ. Addr: Talcottville, Conn, USA. Pres: Clarence W. Jones.

Lutheran Television Productions, a Board of the Lutheran Church-Missouri Synod, producing and distributing "This is the Life" and "The Fisher Family". Exec. Secr: Dr. E. R. Berterman. Prgr. Dir: Dr. H. W. Gockel, 210 No. Broadway, Saint Louis 2, Missouri.

Difusiones Inter Americanas: (DIA), an evangelical organization, established to produce, process, distribute and promote radio and tv. prgr's, recordings and audio visual aids for the evangelizing of Latin America – Addr: Apt. 2470, San José, Costa Rica.

Latin America Mission, 285 Orchard Terrace, Bogota, N.J. and Apt. 1307, San José, Costa Rica. Gen. Dir: Dr. R. Kenneth Strachan. Radio Dir: Paul Pretiz. Publ: "Radio Headlines".

Central American Mission (operates TGNA, Guatemala). 3611 Congres Ave, Dallas, Texas.

Centro Audio-Visual Evangélico (CAVE) Produce and distribute religious, cultural audio-visual materials, like films, records (LPs. 12" and 7"), projector for filmstrips and slides, radio & TV programs, primarily in Portuguese. Idem dubbing foreign language 16 mm movies. Excellent studio and laboratory facilities – Gen. Secretariate: Dr. A. J. Ribeiro. Addr: Box 943, Campinas, São Paulo, Brazil.

The Evangelical Alliance Mission, 2845 West McLean Av, Chicago, Ill, 60647, USA. Gen. Dir: V. Mortenson.

The Gospel Missionary Union. Headquarters, Drawer "C", Smithville, Mo. USA. Pres: Don P. Shidler. Publ: Gospel Message.

West Indies Mission, R. D. 1, Box 279 Homer City, Penn. USA – Dir. Gen: Rev. E. V. Thompson. Superintendant of Haiti Field: Rev. David Hartt. Publ: "The Whitened Harvest". Is working in the West Indies and in South America.

Broadcasting and Film Commission NCCUSA, New York, USA. National Council of Churches of Christ in the USA, 475 Riverside Drive, New York 27, Exec. Dir: W. F. Forc.

RAVEMCCO, New York, USA. Radio, Visual Education and Mass Communication Committee of the Division of Overseas Ministries of the National Council of the Churches of Christ in the USA, 475 Riverside Drive, New York 27, N.Y., Exec. Secr: Dr. B. M. Luben.

Far East Broadcasting Co, Inc, P.O. Box 1, Whittier, California. Pres: Robert H. Bowman. Private Comp. with no member organizations. Publ: "The Broadcaster" monthly.

The Lutheran Hour "Bringing Christ to Nations", Saint Louis, USA. Sponsored by The Lutheran Laymen's League, 2185 Hampton Avenue, St. Louis, Missouri 63139. Exec. Dir: P. Friedrich. Dir. Broadc: C. Thomas Spitz.

The Oriental Missionary Society and the Inter-American Missionary Society, 850 N. Hobart Blvd. Los Angeles 29, California, USA. Pres: Dr. Eugene Erny. Dir. Haiti Field incl. allied missionary activities: E. Turnidge, Box 1, Cap Haitien, Haiti.

World Radio Missionary Fellowship: HCJB-TV, Quito, Ecuador; HOXO, Panama, R.P. USA. Pres: Abe Van der Puy, P.O. Box 691, Miami, Florida. Operates La Voz de los Andes HCJB Ecuador; No. American Headquarters P.O. Box 691, Miami, Florida 33147.

Canadian Baptist Foreign Mission Board, 190 S. George Str, Toronto 5, Ontario, Canada. Gen. Secr: Dr. O. E. Daniel.

ASIA AND PACIFIC

The Near East Council of Churches: William N. Haddad Gen. Dir. of the Commission on Radio Broadcasting, P.O. Box 5376, Beirut, Lebanon.

Christian Broadcasting Association, 420 Lyons Rd, Five Dock, Sydney, N.S.W., Australia. Man. Dir: Rev. V. Turner. Radio prgr. production on behalf of Protestant Churches.

Pacific Broadc. Ass., CPO1000 Tokyo, Japan. Mgr. A. J. Seely. Production and Distribution of radio and tv-programmes.

The Christian Broadcasting System, 91 Chongno, 2-Ka, Seoul, Korea – Dir: E. O. de Camp. Operates st. HLKY.

Philippine Christian Radio Network, Dumaguete City, Philippines – Dir: C. Bernardez. Operates st's DYSR and DZCR.

Broadcasting and Visual Aids Committee of the East Asia Christian Conference (BAVACO), 22 Midorigaoka, Shibuya Ku, Tokyo, Japan – Secr: M. S. Ogawa.

Continued page 246

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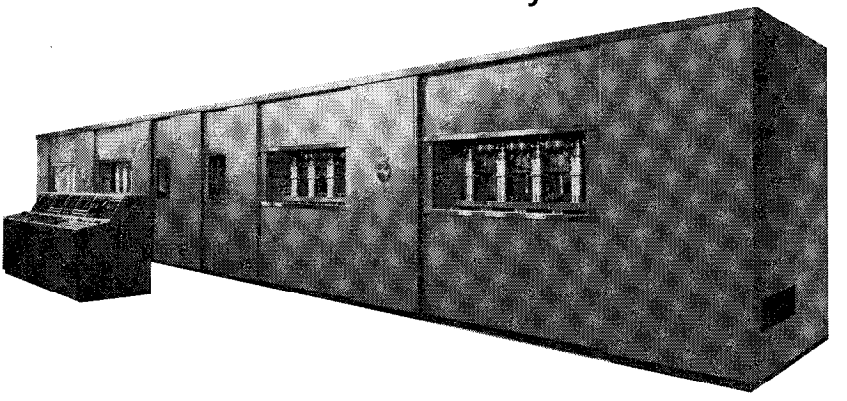

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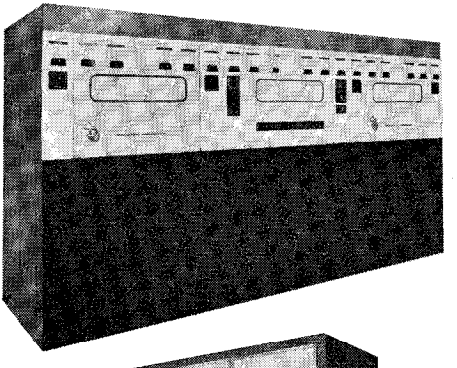

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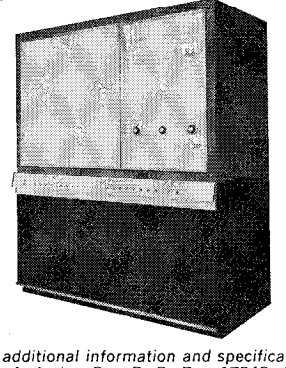

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INTER-CONTINENTAL TELEVISION PROGRESS 1964 - FUTURE 1965

By Edgar T. Martin, Engineering Manager, Voice of America, Washington, D.C., 20547 and George Jacobs, Chief, Frequency Division, Voice of America, Washington, D.C., 20547.

Inter-continental television relay via space satellites continued to make considerable progress during 1964. Although still in an experimental stage, satellites made possible the relay of television programs between North America and Europe on no fewer than 100 occasions during the year. Inter-continental television was also extended to both Europe and North America from the Far East for the first time.

Three new communication satellites were successfully launched by the United States of America during 1964. On January 21, RELAY 2 joined RELAY 1 and TELSTAR 2 in relaying television signals across the Atlantic Ocean. On March 27, RELAY 2's orbit was also favorable for the first two-way live television exchange between Japan and the United States.

On January 25, the ECHO 2 passive reflector satellite was placed into orbit. Measuring approximately 45 meters in diameter (135 feet), this huge satellite was used to reflect radio and television signals from its rigidized aluminum surface.

Experimental radio transmissions were conducted between the Soviet Union and Great Britain, and within North America, but ECHO 2's orbit is such that its use for inter-continental television is not possible.

One of the most spectacular space launchings of the year took place on August 19 when SYNCOM 3 was rocketed into space from Cape Kennedy. SYNCOM stands for synchronous orbit communication satellite.

By an intricate combination of celestial mechanics, rocket power, and ground control, SYNCOM 3 was placed into a stationary synchronous orbit 38,900 kilometers (22,300 miles) over the Pacific Ocean, directly above the intersection of the equator and the 180th parallel (the international date line). In this orbit, the satellite is stationary in relation to the earth, so that the spacecraft appears to be absolutely motionless in the sky.

From its high altitude, SYNCOM 3 can "see" almost one-third of the earth's surface extending from the western regions of the Western Hemisphere to the eastern regions af Asia. The satellite can maintain 24-hour communication over a large part of this area.

Although originally designed for radio relay only, SYNCOM 3 was modified shortly before launch to handle television signals as well. This made possible live television relays of the Japanese Olympics to North America.

No satellite previously has ever been launched into a stationary orbit. During 1963, SYNCOM 2 was placed into a 38,900 kilometer orbit above the Atlantic Ocean, but since it was not directly over the equator, it was not completely stationary and its orbit was a figure-8 pattern in space.

SYNCOM 2 figured in another spectacular space maneuver during 1964, when it was moved from its original location over the Atlantic Ocean to a new position over the south Pacific Ocean. This was accomplished by ground control of small rockets on the spacecraft. SYNCOM 2 is now relaying radio signals between Asia and the United States.

With four active communication satellites possessing television relay capability in operation during 1964 (TELSTAR 2, RELAY's 1 and 2, SYNCOM 3), inter-continental television was made available to more people, in more areas of the world, for longer periods of time than ever before.

From the aura of deep tragedy surrounding President Kennedy's funeral to the exhilaration of the Innsbruck and Tokyo Olympics; from the physical prowess demonstrated during the Liston-Clay world heavyweight boxing match to the political prowess

Continued page 46

GEORGE JACOBS

George Jacobs was born on July 16, 1924, in New York City. He received his B. E. E. degree from Pratt Institute, Brooklyn, 1949, and his M. S. E. E. degree from the University of Maryland in 1960.

Mr. Jacobs is a representative of the Interdepartment Radio Advisory Committee (IRAC) and several other policy-level U.S. Government committees in the field of telecommunications. He has served as a delegate to several international broadcasting and telecommunication conferences, including the 1959 ITU Administrative Radio Conference, where he was the U.S. spokesman for high frequency broadcasting.

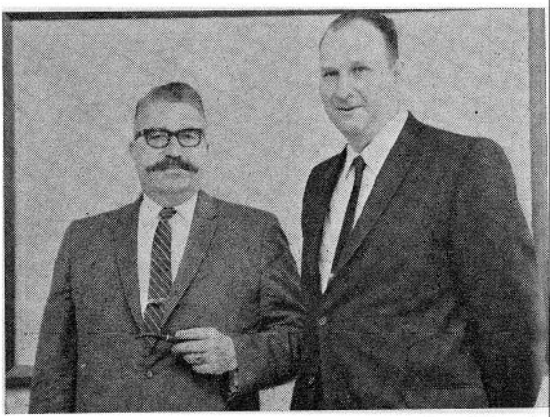
Most recently he attended the Tenth Plenary Assembly of the C.C.I.R and the I.T.U.'s International Space Communication Conference, both held in Geneva during 1963. Mr. Jacobs was the U.S. Delegation's spokesman for satellite broadcasting at both conferences.

Mr. Jacobs is a Senior Member of the IEEE, a member of URSI, and a registrated Professional Engineer in the District of Columbia.

EDGAR T. MARTIN

Edgar T. Martin was born on May 1, 1918, in Princeton, West Virginia. He received his B. S. E. E. in 1938 and his M. S. E. E. in 1953. both from Virginia Polytechnic Institute. He also holds an M. A. in Government from American University, conferred in 1957 and an LL.B. from George Washington University. In 1959, he earned his LL.M. from Georgetown University.

He is a registered Professional Engineer in Virginia and the District of Columbia, and he is also a member of the Virginia Bar. He has attended more than a dozen major international conferences dealing with broadcasting and telecommunications, and was a delegate to the ITU's Administrative Radio Conference held in Geneva.



(Left) Edgar T. Martin, Engineering Manager, Voice of America. (Right) George Jacobs, Chief, Frequency Division, Voice of America.

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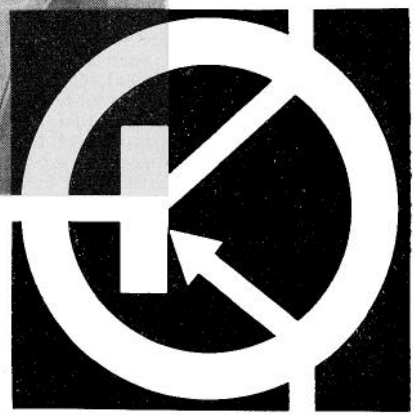

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demonstrated by the various candidates of the British and American elections, tens of millions of television viewers on three continents again bore silent witness to history in the making across the dimensions of geography and time zones — all simultaneous and instantaneous!

On October 22 of the past year, television viewers throughout Europe and North America were again given a glimpse into outer space, as a television camera aboard the spacecraft VOSKHOD transmitted pictures of the satellite's three-man crew back to earth. Relayed to the United States via Eurovision and a RELAY satellite, pilot-engineer Komarov, scientist Feoktistov and medical doctor Yegorov could be seen quite clearly as VOSKHOD orbited in space.

Of the more than 100 television transmissions relayed by satellites during 1964, perhaps the most interesting were those of the Tokyo Olympics.

Television viewers in North America watched on their screens as the 1964 Olympic Games opened in Tokyo's National Stadium on October 10. Much of the Olympic events were also seen in Europe either live as they were taking place, or delayed by only a few hours.

To accomplish this, television signals were sent by microwave from the stadium to the Kashima ground station 50 miles northeast of Tokyo. Kashima's 33-foot dish-shaped antenna beamed the signals up to the SYNCOM 3 satellite, where they were amplified and relayed down to the 85-foot dish antenna at the Point Mugu, California, ground station. The signals were then carried to Los Angeles by microwave, where they were distributed via normal channels to the National Broadcasting Company for showing over its network of stations in the United States.

The European Broadcasting Union and Canadian Broadcasting Corporation made arrangements to have the Olympic signals fed across the United States from Point Mugu to Montreal. Canada-wide broadcasts emanated from the CBC television studios in Montreal. The signals were also recorded in Montreal on magnetic video tape and flown to Europe on chartered jet aircraft for relay on European networks, thus permitting European audiences to see the Olympic events on the same day that they were taking place in Tokyo. Tape recordings sent directly from Tokyo took about 12 hours longer to reach Europe.

Some of the Tokyo Olympic events were also seen in Europe live. This was made possible by relaying SYNCOM 3's signals from Point Mugu to the ground station at Andover, Maine. At times when RELAY 1 was in proper orbit, Andover relayed the signals to the French ground station at Pleumeur-Bodou, and from there through conventional channels to television stations throughout Europe.

Serious consideration was also given during 1964 to the possibility of eventually broadcasting from satellites directly to the general public, without the necessity of going through ground station relays.

A major international conference held under the auspices of the International Telecommunication Union, amended the International Radio Regulations to include the following definition of a new "broadcasting satellite service:"

"Broadcasting-satellite service — A space service in which signals transmitted or retransmitted by space stations, or transmitted by reflection from objects in orbit around the earth, are intended for direct reception by the general public."

The ITU Conference also adopted a recommendation which now appears in the Radio Regulations. It points out that the use of satellite transmissions for direct reception by the general public of sound and television broadcasts may be possible in the future. The recommendation also urges that technical studies be expedited to determine the feasibility of eventually broadcasting from satellites. Experts consider these recent actions by the ITU as important steps toward the future possibility of the general public being able to receive radio and television programs in their own homes direct from satellites.

The era of inter-continental television began on July 23, 1962, when the first trans-Atlantic link was forged with the TELSTAR 1 satellite, which incidently, is now silent. Inter-continental television became of age during 1963 when TELSTAR's 1 and 2, and RELAY 1 made possible more than 130 television relays between North America and Europe. During 1964, as a result of the launching of RELAY 2 and SYNCOM 3, the limits of inter-continental television were further extended to reach into the Far East area.

The year 1965 may see an important change in inter-continental television. During the past year, as in previous years, satellite communications were conducted on an experimental basis. No American experimental communication satellites are planned for 1965, however, the first commercial system may begin operation during the year.

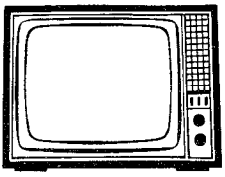
In the United States, the Communications Satellite Corporation has been established to develop this commercial communication satellite system. The governments of Australia, Belgium, Canada, Denmark, France, Germany, Ireland, Italy, Japan, Netherlands, Norway, Spain, Sweden, Switzerland, the United Kingdom and the Vatican City have already concluded agreements with the Corporation, giving it global status. Many other countries are expected to join with the Corporation during 1965 to bring operational communication satellite circuits to as many areas of the globe as technically possible.

Early technical plans released by the Corporation indicate their preference for the high altitude, or synchronous, system for operational use. The Corporation plans to have launched an "Early Bird" synchronous satellite during 1965, which will be placer in orbit 38,900 kilometers (22,300 miles) above the Atlantic Ocean as an initial link between North America and Europe, with links to other areas of the world to follow at a later date.

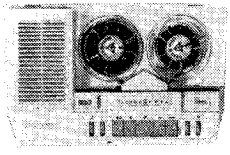
When an operational satellite communication system is established, the amount of inter-continental television material relayed will no doubt depend on the cost of relay as compared to the exchange of film or video tape by means of jet air transport.

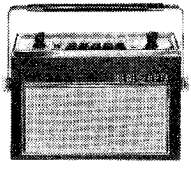
As science and technology conquer the barrier of distance in telecasting, it may be well to reflect a moment on the words uttered recently by a person of prominence:

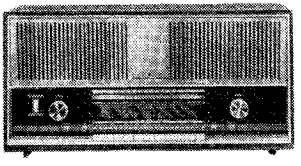
"A communication satellite is totally neutral. Its power supply, transistors, antennas, etc., have no conscience, no principle, no morality. It will broadcast trash or inspiration with equal facility. It will speak the truth as clearly as it will speak falsehood. It is, in the end, nothing more nor nothing less than the men who use it. We can only hope that it will always be used with talent and wisdom."

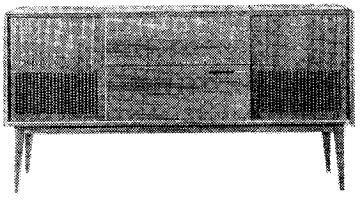


Something for Everybody - Thus the Right Thing for All









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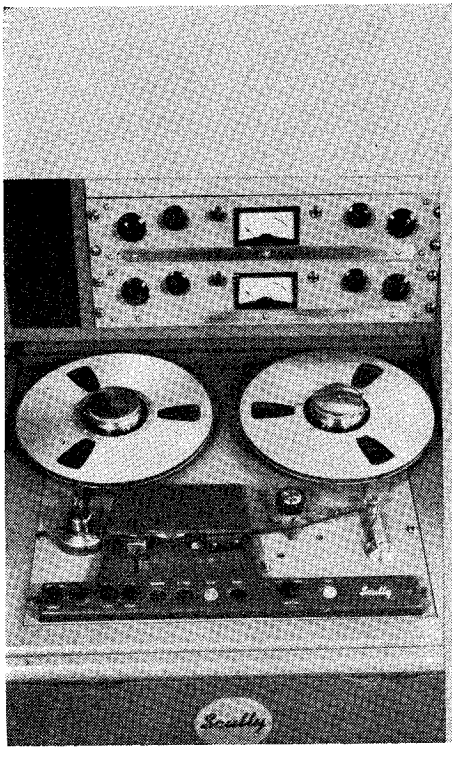

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WHERE TO LISTEN FOR SATELLITE SIGNALS

By George Jacobs, Chief, Frequency Division Voice of America, Washington 25, D.C.

As the clock in the old town Geneva, Switzerland, struck midnight on November 8, 1963, a new era in communications began. At that moment, the last representative from the 70 nations attending the Space Communications Conference of the International Telecommunication Union affixed his signature to the Final Acts of the Conference. The Final Acts contain the results of this five week conference which succeeded in allocating frequencies, for the first time, to the various space communication services. On January 1, 1965, the Final Acts officially will become a part of the International Radio Regulations, the basic document governing the operation of radio throughout the world.

Every space satellite or space vehicle launched, whatever its purpose, is dependent upon communications for its link with the earth. The conference, attended by more than 400 scientists, engineers and government officials from 70 countries, discussed all facets of radiocommunication between earth and space, and between space vehicles. After five weeks of discussion and negotiation, the conference agreed to allocate frequency bands in the crowded radio spectrum to serve space communication requirements for at least the next generation. A total of nearly 6,100 megacycles have been allocated to the various kinds of space communication services in discrete bands between 10 mc/s and 32.2 gc/s (a gc/s, or gigacycle is equivalent to 1,000 mc/s). The success of the conference has been hailed by experts as a great step toward the eventual development of communication, weather and navigational satellite systems, as well as permitting expanded space research and exploration, both manned and unmanned.

The following h.f. and v.h.f. bands allocated by the conference to various space communication services are those that can be received by radio amateurs and space listeners with a minimum of special equipment. In addition, 27 bands were also allocated on higher frequencies, but it is unlikely that signals in these bands can be received without complex receiving equipment.

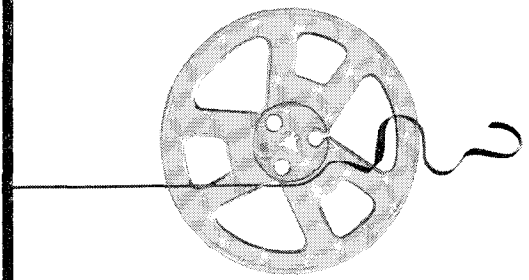
Band	*Purpose of Allocation*
10,003 — 10,005 kc/s	space research
15,762 — 15,768 kc/s	space research
18,030 — 18,036 kc/s	space research
19,990 — 20,010 kc/s	space research
20,007 kc/s	may be used in an emergency, in the search for, and rescue of, astronauts and space vehicles
30,005 — 30,010 kc/s	space research
39,986 — 40,002 kc/s	space research
136 — 137 mc/s	space research (telemetering and tracking)
137 — 138 mc/s	meteorological satellites, space research (telemetering and tracking) and space service
143.6 — 143.65 mc/s	space research (telemetering and tracking)
144 — 146 mc/s	radio amateur space activities
148.25 mc/s (± 15 kc/s)	space telecommand
149.9 — 150.05 mc/s	radionavigation satellites
154.2 mc/s (± 15 kc/s)	space telecommand
183.1 — 184.1 mc/s	space research
267 — 273 mc/s	space (telemetering)
399.9 — 400.05 mc/s	radionavigation satellites
400.05 — 401 mc/s	meteorological satellites (maintenance telemetry), space research (telemetering and tracking)
401 — 402 mc/s	space (telemetering)
449.75 — 450.25 mc/s	space telecommand
460 — 470 mc/s	meteorological satellites

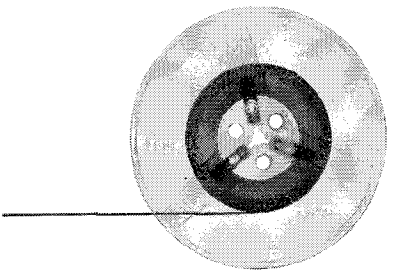
The first satellites launched by the United States of America used frequencies of approximately 108 mc/s, but since 1960 almost all American satellites have contained a beacon or telemetry transmitter in the band 136 — 137 mc/s. Almost all of the satellites launched by the Soviet Union to date have used the 19,990 — 20,010 kc/s band, and many have also used the band 30,005 — 30,010 kc/s, as well as frequencies in a narrow band near 90 mc/s. Future satellites are expected to use frequencies in accordance with the allocations made at Geneva last year.

As of November 15, 1964, no fewer than 39 satellites were in orbit transmitting radio signals back to earth on 77 different frequencies. Many of the signals in the h.f. bands can often be heard well on relatively inexpensive short-wave receivers, while the signals in the v.h.f. bands can often be received with relatively simple frequency converters. The following list contains those frequencies on which space orbiting satellites were transmitting as of November 15, 1964. Many of these satellites are expected to continue to transmit radio signals during 1965. The satellites which should be heard with the least difficulty are those which transmit CW beacon signals. These signals can usually be identified by their steady tone when the receiver's beat frequency oscillator (BFO) is in the ON position. Telemetry signals may be somewhat more difficult to receive, since telemetry data, in most cases, is transmitted for brief periods upon command from the ground. Telemetry signals usually consist of two or more musical tones being transmitted at the same time, or in the case of the Russian COSMOS satellites, of a series of dots and dashes of different lengths.

Inclination and period data are given in the following list as a further aid in identifying satellites from which signals can be received. The inclination is the angle that the satellite's orbit makes with the equator. If a directional antenna is being used to receive satellite signals, the inclination data can be used for determining the direction from which the satellite's signal should be heard first. The satellite's period is the time it takes, in minutes, for the satellite to complete an orbit. By timing reception on successive orbits, it is often possible to identify the satellite whose signals are being received.

Continued page 50 and 52





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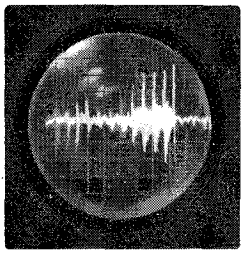

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LIST OF FREQUENCIES ON WHICH SATELLITES CAN BE HEARD (AS OF NOVEMBER 15, 1964)

Frequency (Mc/s)	Satellite Name and Country	Date Launched	Inclination Degrees	Period Minutes	Remarks
1.5	EXPLORER 20 – USA	25 Aug. 1964	80	104	Ionospheric sounder
2.0	–	–	–	–	–
2.850	–	–	–	–	–
3.720	–	–	–	–	–
5.470	–	–	–	–	–
7.220	–	–	–	–	–
19.430	ELEKTRON 2 – USSR	20 Jan. 1964	59	1356	Comand telemetry and beacon
19.540	–	–	–	–	–
19.800	COSMOS 40 – USSR	18 Aug. 1964	56	92	–
19.895	POLYOT 2 – USSR	12 Apr. 1964	58	92	–
19.996	COSMOS 50 – USSR	28 Oct. 1964	51	89	–
20.005	ELEKTRON 1 – USSR	30 Jan. 1964	61	169	–
20.005	EXPLORER 22 – USA	10 Oct. 1964	80	105	C. W. beacon on command
20.005	COSMOS 31 – USSR	6 Jun. 1964	49	89	Command telemetry and beacon
20.034	COSMOS 38 – USSR	18 Aug. 1964	56	91	–
20.084	COSMOS 39 – USSR	18 Aug. 1964	56	92	–
30.007	COSMOS 31 – USSR	6 Jun. 1964	48	89	–
30.008	ELEKTRON 1 – USSR	30 Jan. 1964	61	169	–
40.010	EXPLORER 22 – USA	10 Oct. 1964	80	105	C. W. beacon on command
41.010	–	–	–	–	–
54	1963-49C – USA	5 Dec. 1963	90	107	Command telemetry and beacon
89.102	COSMOS 40 – USSR	18 Aug. 1964	56	92	–
90.022	COSMOS 25 – USSR	27 Feb. 1964	49	90	–
90.022	COSMOS 31 – USSR	6 Jun. 1964	49	89	–
90.023	COSMOS 44 – USSR	29 Aug. 1964	65	100	–
90.156	COSMOS 38 – USSR	18 Aug. 1964	56	91	–
90.225	ELEKTRON 2 – USSR	30 Jan. 1964	59	1356	–
90.378	COSMOS 39 – USSR	18 Aug. 1964	56	92	–
108.012	VANGUARD 1 – USA	17 Mar. 1958	34	134	C. W. beacon only when in sunlight
136.020	ECHO 2 – USA	21 Jan. 1964	82	109	C. W. beacon and continuous telemetry
136.050	TELSTAR 2 – USA	7 May 1963	62	43	C. W. beacon and command telemetry
136.077	ALOUETTE – USA/CAN	29 Sep. 1962	80	106	Telemetry on command
136.080	EXPLORER 23 – USA	6 Nov. 1964	52	99	–
136.111	EXPLORER 18 – USA	27 Nov. 1963	36	5602	C. W. beacon and command telemetry
136.140	RELAY 1 – USA	13 Dec. 1962	48	185	Telemetry on command
136.142	RELAY 2 – USA	21 Jan. 1964	46	195	–
136 145	EXPLORER 21 – USA	4 Oct. 1964	34	2097	C. W. beacon and command telemetry
136.170	EXPLORER 22 – USA	10 Oct. 1964	80	105	C. W. beacon and command telemetry
136.170	ECHO 2 – USA	21 Jan. 1964	82	109	–
136.200	OGO 1 – USA	5 Sep. 1964	31	3837	C. W. beacon
136.233	TIROS 8 – USA	21 Dec. 1963	59	99	C. W. beacon and command telemetry
136.234	TIROS 7 – USA	19 Jun. 1963	58	97	–
136.350	EXPLORER 20 – USA	25 Aug. 1964	80	104	Telemetry on command
136.406	ARIEL 1 – USA/UK	25 Apr. 1962	54	101	C. W. beacon and command telemetry
136.468	SYNCOM 2 – USA	26 Jul. 1963	33	1438	Command telemetry and beacon
136.470	SYNCOM 3 – USA	19 Aug. 1964	1	1436	–
136.558	ARIEL 2 – USA/UK	27 Mar. 1964	52	101	C. W. beacon and command telemetry
136.593	ALOUETTE – USA/CAN	29 Sep. 1962	80	106	Telemetry on command
136.620	RELAY 2 – USA	21 Jan. 1964	46	195	Command telemetry and beacon
136.620	RELAY 1 – USA	13 Dec. 1962	48	185	–
136.653	1963-38C – USA	28 Sep. 1963	90	107	C. W. beacon and continuous telemetry
136.680	EXPLORER 20 – USA	25 Aug. 1964	80	104	C. W. beacon and command telemetry
136.771	1964- 40C – USA	17 Jul. 1964	37	2366	C. W. beacon
136.803	EGRS – USA	11 Jan. 1964	70	104	C. W. beacon and continuous telemetry
136.860	EXPLORER 23 – USA	6 Nov. 1964	52	99	C. W. beacon and command telemetry
136.886	SOLAR RADIATION – USA	11 Jan. 1964	70	104	C. W. beacon and continuous telemetry
136.921	TIROS 7 – USA	19 Jun. 1963	58	97	C. W. beacon and command telemetry
136.924	TIROS 8 – USA	21 Dec. 1963	59	99	–
136.980	SYNCOM 2 – USA	26 Jul. 1963	33	1438	Telemetry on command and beacon
136.980	SYNCOM 3 – USA	19 Aug. 1964	1	1436	–
150.0	1964-26A – USA	4 Jun. 1964	90	103	Tone modulated C. W.
150.0	1963-22A – USA	11 Jun. 1963	90	100	Command telemetry and beacon
150.0	TRANSIT 4A – USA	29 Jun. 1961	67	104	Tone modulated C.W.
150.0	1963-49B – USA	5 Dec. 1963	90	107	Tone modulated C.W. and telemetry
162.0	EXPLORER 22 – USA	10 Oct. 1964	80	105	Command C.W. Doppler transmitter
162.0	ANNA 1B – USA	31 Oct. 1962	50	108	Command tone modulated C.W.
162.0	1963-49C – USA	5 Dec. 1963	90	107	Tone modulated C.W.
324.0	ANNA 1B – USA	31 Oct. 1962	50	108	Command tone modulated C.W.
324.0	1963-49C – USA	5 Dec. 1963	90	107	Tone modulated C.W.
324.0	EXPLORER 22 – USA	10 Oct. 1964	80	105	Command C.W. Doppler transmitter
360.090	EXPLORER 22 – USA	–	–	–	Command C.W.
400.0	TRANSIT 4A – USA	29 Jun. 1961	67	104	Tone modulated C.W.
400.0	1963-22A – USA	16 Jun. 1963	90	100	Command telemetry and beacon
400.0	1963-49B – USA	5 Dec. 1963	90	107	Tone modulated C.W. and telemetry
400.0	1964-26A – USA	4 Jun. 1964	90	103	Tone modulated C.W.
400.250	OGO 1 – USA	5 Sep. 1964	31	3837	Telemetry and beacon on command
400.850	OGO 1 – USA	–	–	–	–

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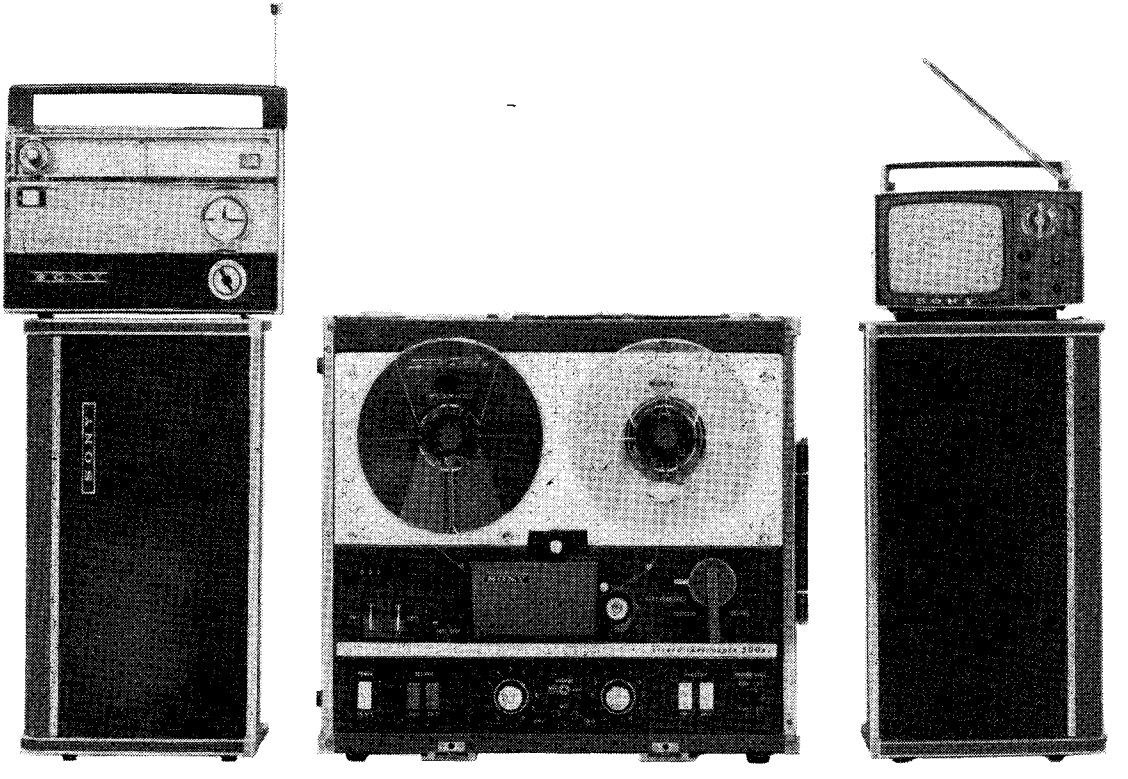

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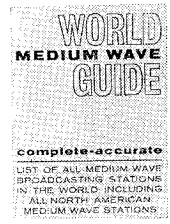
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Continued from page 50

The following list contains frequencies that are expected to be used on satellites that the United States plans to launch during 1965. The list is by no means complete, and some changes in frequency may be made before actual launch time. The list, however, can be used as a guide as new launches are announced.

LIST OF FREQUENCIES TO BE USED ON AMERICAN SATELLITES EXPECTED TO BE LAUNCHED DURING 1965.

Frequency (Mc/s)	Satellite Name and Purpose	Remarks
136.23	NIMBUS B – Advanced Weather Satellite	Telemetry on command
136.5	–	Continuous C.W. and command telemetry
136.95	–	Continuous telemetry
136.23	TIROS 9 – Operational Weather Satellite	Continuous C.W. beacon and command telemetry
136.92	–	–
136.275	SERB B – Radiation Belt Research	Continuous telemetry
136.32	S-6A – Atmospheric Structure Research	Telemetry on command
136.56	–	Continuous C.W. beacon
136.71	OSO-B – Orbiting Solar Observatory	Continuous telemetry and beacon
136.26	OAO-A – Orbiting Astronomical Observatory	Telemetry on command
136.44	–	Continuous C.W. beacon
136.08	ALOUETTE-2 USA/CAN Ionospheric Propagation Research	Telemetry on command
136.59	–	–
136.98	–	C.W. beacon on command
136.125	IMP-C – Interplanetary Research	Continuous C.W. beacon and telemetry
136.916	–	Telemetry on command
136.105	IMP-D – Interplanetary Research	Continuous C.W. beacon and telemetry
136.918	–	Telemetry on command
136.53	SAN MARCO USA/ITALY Research Satellite	Telemetry on command
136.74	–	Continuous C.W. beacon and telemetry
136.35	FR-1 – USA/FRANCE VLF Radio Propagation Research	Telemetry on command
136.8	–	Continuous C.W. beacon and telemetry
136.40	PEGASUS – Micrometeorite Research	Telemetry on command
136.89	–	C.W. beacon and command telemetry
145.90	OSCAR 3 – Amateur Radio Active Communication Satellite	Repeater communication channel
145.85	–	C.W. beacon and continuous telemetry

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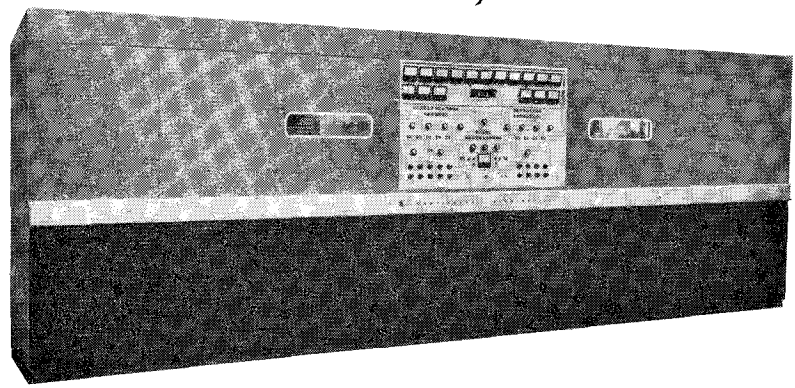

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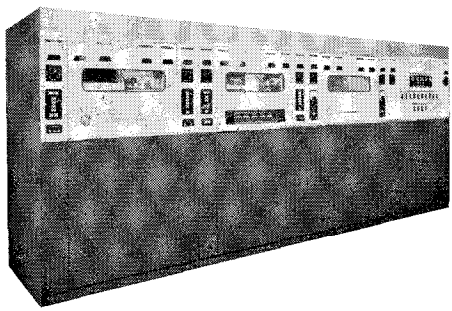
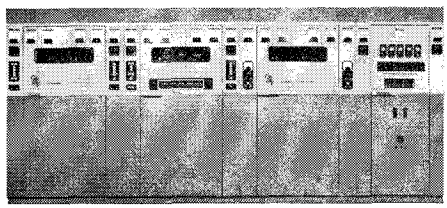
- High-level plate modulation
- Two parallel-connected power amplifier tubes
- Power supplies use solid state rectifiers
- Utilizes vapor phase cooling
- Capable of 100% trapezoidal modulation



TYPE 418A 100 KW HF BROADCAST TRANSMITTER

- RF system can be operated as FSK communications transmitter independently of modulator
- Frequency range: 3 to 30 megacycles
- High-level plate modulation
- One power amplifier tube
- Power supplies use solid state rectifiers
- Utilizes vapor phase cooling
- Capable of 100% trapezoidal modulation



TYPE 417B 50 KW HF BROADCAST TRANSMITTER

- RF system can be operated as FSK communications transmitter independently of modulator
- Frequency range: 3 to 30 megacycles
- High-level plate modulation
- One power amplifier tube
- Power supplies use solid state rectifiers
- Air cooled
- Can be supplied capable of 100% trapezoidal modulation

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R.T.B., Brussels, Belgium: 1) Mrs. Georgin, French Section – 2) Mrs. Engels, Flemish Section – 3) Dorothy Forster, English Section.

All India Radio, New Delhi, India: 4) Marie Antoinette Raina, French announcer – 5) Prabha Rozario, English announcer.

Korean Broadcasting System, "Voice of Free Korea", Seoul, Korea: 6) Yoon, Sok-young, Spanish announcer – 7) Miss Kim, Hyun Sim, English announcer – 8) Kim, Yong-moon, French announcer.

Radio Australia, Melbourne: 9) Elly Siahaan, Indonesian announcer – 10) K. Sumaamidjaja (Indonesian section – Listeners Choice) – 11) Keith Glover (Listeners Mailbag – English) – 12) Martin Manelis, Supervisor French section.

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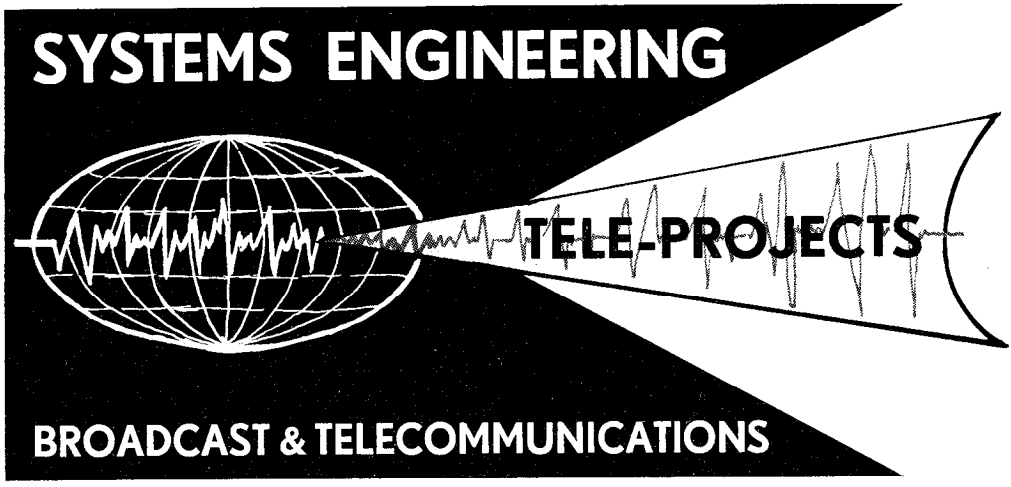

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A NEW AND EXCITING TELEVISION PROJECT

BY MICHAEL I. HAYWARD

Acting Chief, English Language Sce., United Nations Radio.

This is the story of a new and exciting television project. I am grateful to the publishers of the World Radio TV Handbook for enabling me to tell it.

For United Nations Television, this project has been a "dream" assignment: a chance to use a medium of mass communication to say something worthwhile, and say it in a human and colorful language! *International Zone: 1964*, has given us a chance to project the people in one part of the world on to the television screens of another part of the world.

During the past two decades, we have heard a lot about the "East-West" conflict. We think of it in terms of a conflict of ideology. But recently another conflict has loomed ominously on the world horizon: a "North-South" conflict.

If you look on a map, you will notice that, broadly speaking, the areas in the Northern Hemisphere are the "have" nations, the industrialized and developed countries. Vast areas in the Southern Hemisphere are the "have not" nations — many newly independent, and, most, only beginning to develop.

The conflict between the countries that "have" and the countries that "have not" is becoming sharper every day. For the first time in history, the people in the "have not" countries have become aware of their low standard of living, of their poverty, ignorance and poor health. Indeed, the Secretary-General of the United Nations, U Thant, has declared this conflict "much more real and much more serious and potentially much more explosive than the division of the world on ideological grounds".

There is much encouraging to report, however. The 1960's have been proclaimed the "Development Decade", a period for a concentrated effort to narrow the widening gap between the developed and the developing countries. The effort must be made primarily by the peoples who are demanding to cross the widening gap, of course, but they are being helped also by people in developed countries, and by people who work for international organizations. This exciting story of self-help, spurred on by assistance from others, is what *International Zone* set out to tell.

First of all, Alistair Cooke, host of the English language series, and George Movshon, Executive Producer of International Zone, set out on a round-the-world air journey to observe live situations at first hand. Three continents were chosen as locales for the programmes: Asia, Africa and Latin America.

The task was to film life in these three continents exactly as it happened, to film it in such vivid and personal terms that television audiences in developed countries could get a sense of the reality of poverty, and *change*, as it is being experienced by the people who live on the wrong side of the widening gap.

Meanwhile, "back at United Nations Headquarters", a totally new look was taken at the technical equipment required to tell the story in the best way possible.

Consider one simple problem: how to film people going about their daily lives without putting on an act for the camera. Even in a sophisticated city of the Western world, a film crew at work soon gathers a large crowd of onlookers — whether it be on Fifth Avenue or Oxford Street, on the Via Veneto or the Champs Elysée. In a small village in Latin America, or a tiny fishing port in Asia, or the bush country in Africa, the presence of a film crew could disrupt the daily routine of the entire community.

A new approach to the technical equipment for the filming was indicated. Our usual camera rigs with blimps, heavy storage batteries, powerful floodlights just would not do. We wanted to eavesdrop on life, affecting it as little as possible. Chris Lankester, Chief Sound Engineer, and Claude Houlbreque, Chief Cameraman, consulted authorities on both sides of the Atlantic — in North America and in Europe. The enthusiasm of filmmakers like Bob Drew, Richy Leacock, Don Pennybaker, who were most generous of their time and advice, convinced us that *cinéma vérité* techniques were tailor-made for our task. But a new ingredient had to be added to the conventional *cinéma vérité* rigs.

Three teams would head into areas remote from United Nations Headquarters, for four months at a time. They would frequently be away from sources of electricity, work in cold climates at altitudes up to 15,000 feet, and in hot and humid climates where the temperature would rise above 110° Farenheit. Not only would the crews have to take it, but also the cameras, the sound recorders, and the delicate electronic devices that kept sight and sound together.

So Mr. Lankester designed new modifications for the rigs (and since he volunteered to take the Asian assignment himself, there was every hope that his equipment would work!). For a time, talk of "blooplights" synchronized with "beeps", transistorized super-het receivers, tone-modulated transmitters, filled the television corridors. Until, finally, three rigs were ready to venture forth, all allowing complete freedom of camera movement by eliminating all connecting cable between camera and recorder. All were designed to be hand-held and operate with available light.

Finally, late in the autumn of last year, three teams were ready to start out, each to a different continent. The African team was headed by Gilbert Lauzun, a Frenchman, the Asian team by Peter Hollander, an American, and the Latin American team by Executive Producer Movshon, a South African. Other staff connected with the project came from Britain, Canada, Sweden, India, Australia, and Poland — a truly unique production unit, even for United Nations Television.

To prepare for this day of departure, Ben Park, an American television and radio documentarist, had been busy at work on the research and logistics. He filled up a file cabinet of documents and correspondence with the United Nations Specialized Agencies, with technical assistance experts in the field, with government officials whose support was essential, with the network of U.N. Information Centres which would facilitate the filming on the scene.

All this material was digested and drawn together in a full dossier about each situation the team was to cover. In addition, one or two alternate stories were provided in case the primary one turned out

Continued page 278

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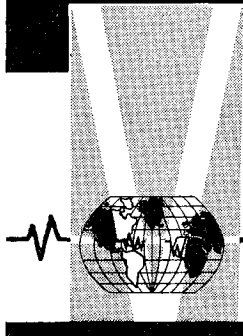

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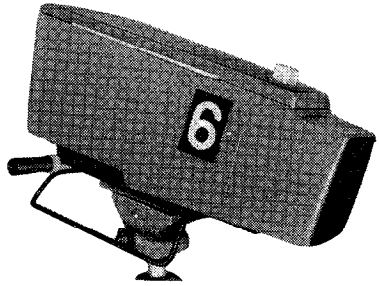

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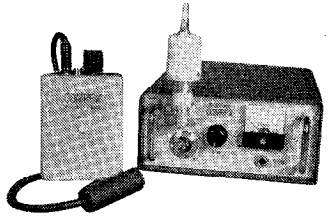

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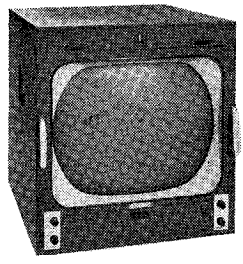

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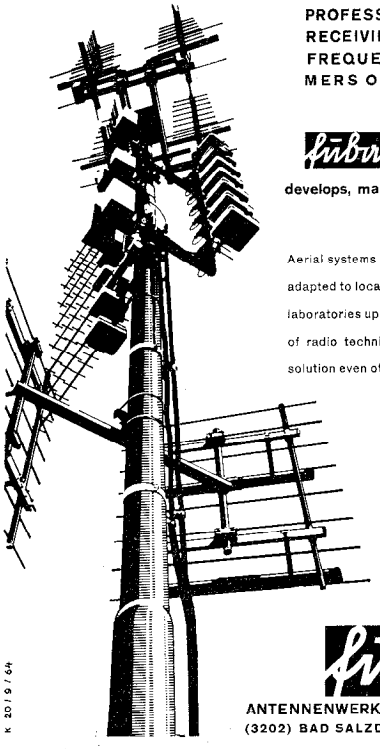
SHORT-WAVE RECEPTION CONDITIONS EXPECTED DURING 1965

By George Jacobs, Chief, Frequency Division, Voice of America

The year 1965 is expected to have considerable scientific importance as far as short-wave reception is concerned. This is the year in which the present sunspot cycle (the 19th observed since records have been kept), is expected to reach a minimum value, and a new cycle will begin.

The present sunspot cycle began during April 1954 and reached a recordbreaking peak value of 201 during March 1958. Since that time the cycle has been declining slowly, but steadily. On the average, it takes approximately 11 years for a sunspot cycle to complete its life.

During 1964, sunspot activity ranged from a level of 19 in January to an estimated value of 9 by the end of the year. The average value of smoothed sunspot number for the year is estimated to be 14. During 1965 the cycle is expected to decline from an estimated value of 8 in January to a minimum of 5 which is predicted to occur sometime during April or May. At this point, the old cycle will end, and the new cycle (cycle 20) will begin. The new cycle is expected to rise slowly at first, possibly reaching a value of 12 by the end of the year. An average smoothed sunspot number of 7 is forecast for 1965, which would be somewhat less than was observed during 1964.



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The sunspot count is an indication of the intensity of ionization in the earth's atmosphere. In turn, the degree of ionization determines what frequency bands will be received with strong, clear signals. In general, the greater the number of sunspots the greater is the intensity of ionization and the higher the frequencies that the ionosphere can reflect. During 1957-58, when the sunspot count was higher than ever recorded previously, short-wave conditions in the 26, 21, 17 and 15 mc broadcast bands (11, 13, 16 and 19 meter bands) were at their best.

As the sunspot count decreased since 1958, reception of the high megacycle bands has deteriorated, while reception of the lower bands has improved. During 1964, the best bands for long-distance broadcast reception were generally the 17 and 15 mc bands (16 and 19 meters) during the daylight hours, and the 9, 7 and 6 mc bands (31, 41 and 49 meters) during the hours of darkness. A further decrease in solar activity is predicted for 1965, with the result that reception of the higher frequency bands is expected to continue to be relatively poor, while reception of the lower frequency bands is expected to improve slightly.

The following is a general summary of reception conditions expected during 1965, by meter band:

11 meters:
Very little long-distance reception will be possible in this band during the low period of solar activity. It will be practically useless for broadcasting during 1965.

13 meters:
Some broadcasting stations will be heard in this band, especially during the winter months. Conditions are expected to be more favorable for this band during the end of the year rather than at the beginning. Conditions on this band also favor reception from southern and tropical areas than from other areas of the world.

16 meters:
Long-distance openings over many thousands of miles should be possible during the daylight hours of the fall, winter and spring months. Stations from southern and tropical areas may also be heard in this band on a regular basis during the summer months. Quite often, it should be possible to receive very distant stations with strong signals in this band.

19 meters:
This is expected to be the best band for long-distance reception during the daytime hours. Stations from all areas of the world should be heard sometime between dawn and sundown. Quite often, especially during the late spring and summer months, strong reception should also be possible during the early evening hours.

25 meters:
This is a good band for reception during the daylight hours of stations that are between approximately 750 and 2100 miles away (1250 and 3500 km). Long-distance reception should also be possible during the late afternoon and early evening hours. Very little reception is likely on this band during the hours of darkness. As the sunspot cycle nears

Continued page 60

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TABLE OF THE MOST SUITABLE METRE BANDS, 1965

The table shows the bands that are likely to be best for short wave reception to and from every major area in the world at various times of the day for the four seasons of 1965. The figures in the table should be used as a guide only. Where the band given is found to be not suitable, try the one immediately above or below. To use the table, first choose the area in which you are located, then for the time desired slide your finger across the line until you have located the area to which you want to listen, for the proper season. For example, a listener in the West European area would best receive the 16 m.b. at 14 GMT from the Eastern USA during the winter months.

Prepared by George Jacobs, Chief, Frequency Division, Voice of America.

THE LISTENER'S AREA	Local time	Approx. GMT Time	LOCATION OF TRANSMITTING STATION																									
			JAN./FEB.,				NOV./DEC. 1965				MAR./APR., SEPT./OCT. 1965								MAY–AUGUST 1965									
			Eu/No.Af.	ME.	N.Am.(E)	N.Am.(W)	So.Am.	C./So.Af.	So.As.	Ea.As.	Aus./NZ.	Eu/No.Af.	ME.	N.Am.(E)	N.Am.(W)	So.Am.	C.So.Af.	So.As.	Ea.As.	Aus./NZ.	Eu/No.Af.	ME.	N.Am.(E)	N.Am.(W)	So.Am.	C./So.Af.	So.As.	Ea.As.	Aus./NZ.
CENTRAL	07	06	49	41	49	49	49	41	19	31	31	41	31	49	49	49	31	16	25	25	41	31	49	49	31	31	19	19	19
AND	15	14	25	19	16	25	16	13	25	41	19	25	19	19	19	16	13	16	19	19	25	19	19	25	19	16	19	19	25
NO. EUROPE	21	20	49	41	49	49	31	31	41	49	41	41	41	31	31	25	31	31	31	41	31	31	19	25	19	25	31	31	31
EUROPE (WE.)	07	06	49	31	49	49	49	31	19	25	31	49	25	49	49	49	25	19	25	25	41	25	49	49	31	25	19	19	19
AND	15	14	25	16	16	19	16	13	16	31	19	19	19	16	19	16	13	16	19	19	25	19	19	25	19	16	16	19	25
NO. AFRICA	21	20	41	41	49	31	31	25	41	49	31	25	31	25	25	25	25	31	31	25	31	25	19	19	19	25	25	31	25
MIDDLE EAST	07	05	41	49	49	49	49	49	19	16	16	41	49	49	49	49	31	16	16	16	25	31	49	31	25	25	19	19	16
	15	13	16	25	19	49	16	13	16	31	19	19	25	19	25	16	13	13	19	19	19	25	19	31	16	13	13	19	31
	21	19	41	49	31	31	31	31	41	41	31	31	49	25	25	25	19	31	31	41	25	31	19	19	19	19	25	31	31
NORTH AMERICA (EAST)	07	12	25	19	49	49	25	19	25	49	31	19	19	49	49	19	19	19	25	25	19	19	31	25	25	19	25	25	31
	15	20	31	31	25	19	16	16	19	25	16	25	25	25	19	19	16	25	25	19	19	25	19	19	16	19	19	19	19
	21	02	49	49	49	49	31	49	31	31	25	49	49	49	31	25	31	49	31	25	31	31	31	25	25	31	19	19	19
NORTH AMERICA (WEST)	07	15	19	31	25	49	19	16	49	49	49	19	19	19	49	19	19	25	49	49	25	25	25	31	49	19	31	31	31
	15	23	49	31	19	25	16	25	19	16	13	49	49	19	25	16	19	19	19	13	19	19	19	19	16	25	19	19	16
	21	05	49	49	49	49	31	31	31	49	31	49	49	49	49	31	49	31	25	25	31	31	31	31	31	49	19	19	16
CENTRAL AMERICA	07	13	19	25	31	31	19	19	19	31	19	19	19	19	31	19	19	19	31	31	19	19	25	31	25	19	19	25	31
	15	21	49	49	16	16	19	19	19	19	19	19	31	16	16	16	25	19	19	16	16	19	19	19	16	19	19	19	25
	21	03	49	49	49	31	31	31	31	19	19	31	49	49	31	25	31	31	25	16	31	31	31	25	25	25	19	25	19
SOUTH AMERICA	07	11	19	16	31	31	31	16	16	31	19	19	16	31	49	31	16	16	19	31	25	19	31	31	49	19	16	49	49
	15	19	25	25	16	13	19	16	19	19	19	19	25	13	16	19	13	19	25	25	19	16	16	16	19	19	25	19	25
	21	01	49	31	31	19	25	25	49	16	19	31	49	25	19	31	25	25	19	19	25	31	25	25	31	25	31	25	49
CENTRAL AND SO. AFRICA	07	05	31	41	49	31	31	41	19	16	19	31	31	49	49	25	41	16	19	19	31	31	31	49	49	49	16	19	16
	15	13	13	13	16	25	19	19	13	41	16	13	13	19	19	16	16	13	19	25	16	16	19	25	19	19	13	19	31
	21	19	25	25	16	16	19	19	25	41	31	25	19	16	19	19	16	19	31	41	19	16	19	19	16	19	31	31	49
SOUTH ASIA	07	02	49	41	49	19	49	25	19	16	16	41	41	19	19	19	25	19	16	16	25	25	19	19	49	41	25	19	16
	15	10	16	13	49	49	16	13	19	25	16	16	16	49	49	25	16	19	19	19	19	16	25	31	16	16	19	16	25
	21	16	31	31	25	49	19	16	41	49	25	25	19	25	25	19	13	25	31	31	25	25	25	25	16	25	31	31	31
EAST ASIA	07	23	49	41	19	16	16	41	31	31	19	41	31	19	19	19	41	31	25	16	31	25	19	19	19	31	31	25	16
	15	07	25	16	49	49	25	16	13	19	16	25	19	49	49	31	16	16	19	19	19	19	49	25	31	19	16	16	19
	21	13	41	31	49	49	31	41	41	49	31	19	19	31	49	19	19	19	41	25	19	19	25	31	25	19	25	25	31
AUSTRALIA AND N. ZEALAND	07	21	25	31	16	16	19	19	25	41	25	31	31	19	13	13	41	49	41	31	25	31	19	19	25	49	41	25	31
	15	05	25	16	31	31	19	25	16	13	19	25	16	31	25	25	16	16	16	19	19	16	25	16	49	16	16	16	25
	21	11	19	16	49	49	19	16	25	19	25	19	16	49	31	31	19	25	25	31	31	25	31	31	49	31	31	31	41

Short-Wave Reception Conditions

Continued from page 58

its minimum value, more and more stations throughout the world are expected to make use of this band.

31 meters:
This is also expected to be a very good band for daytime reception over relatively short distances on the order of 500 to 1000 miles (850 to 1700 km). Fairly good long-distance reception should be possible during the hours of darkness, especially during the spring and summer months.

41 and 49 meters:
Good short-range reception should be possible during the daytime up to distances of approximately 750 miles (1250 km). These will be the best bands for long-distance reception during the night time hours throughout the year. During the winter months, these bands may be the only ones in which good reception may be possible after sunset. Since these are the lowest frequency bands allocated internationally, almost all broadcasters will make use of them during the hours of darkness. For this reason, there is expected to be extreme crowding and heavy interference between stations using this band during 1965.

60, 80 and 160 meters:
As the sunspot numbers decrease, these bands become more useful for regional short-wave broadcasting. In fact, conditions on these bands, especially during the hours of darkness, are expected to be better during 1965 than they have been for the past 10 years. During the daylight hours, stations within a radius of a few hundred miles should be heard well. After sunset, especially during the late fall, winter and early spring months, good reception in these bands may be possible up to several thousand miles.

For more specific reception information, please refer to the Table of The Most Suitable Meter Bands for 1965 (see above).

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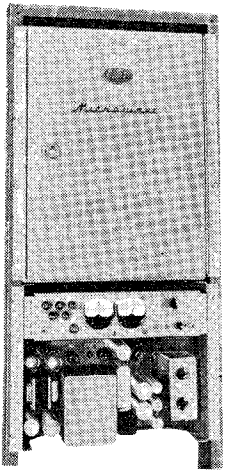

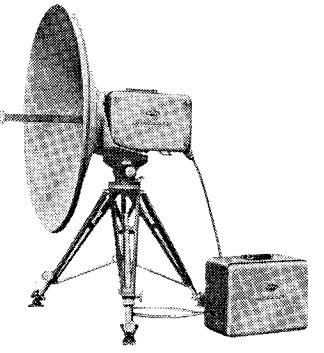

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R. STATION WWV, WWVH, WWVB and WWVL (Go.)

St. WWV, Greenbelt, Maryland, USA: Eng-in-Charge. L. Honea. St. WWVH, Box 578, Puunene, Maui, Hawaii: Eng-in-Charge. S. Katahara. WWVB/WWVL, Box 83-E, Route 2, Ft. Collins, Colo, USA: Eng-in-Charge. R. F. Carle – **L.P:** Chief Freq. and Time Broadc. Sce's. D. H. Andrews, National Bureau of Standards, Boulder, Colo, USA.
Standard Radio Frequencies:
WWV, 2500kc 1kW; 5000kc 8kW, 10000kc 9kW, 15000kc 9kW, 20000kc 1kW, 25000kc 0.1kW: The broadc. are continuous, night and day, exc. from 45 min. to 49 min. past each h – **WWVH,** 5000kc 2kW, 10000kc 2kW, 15000kc 2kW: Continuous exc. from 15 min. to 19 min. past each h – **WWVB,** 60kc 7kW: Continuous – **WWVL,** 20kc 1kW: Continuous, except to permit experimental changes.

Program:
WWV and WWVH transmit radio propagation forecasts in International Morse Code every 5 min's just preceding the voice ann's; the IUWDS "Geoalert" is broadc. in International Morse Code each h from WWV during the 19th min. and from WWVH during the 49th min. Universal Time is ann. from both st's in Intern. Morse Code each 5 min. At WWV a voice ann. of Eastern Standard Time is given each 5 min. as follows: "National Bureau of Standards, WWV, when the tone returns Eastern Standard Time will be... hours, ... minutes". At WWVH a voice ann. of Hawaiian Standard Time is given each 5 min's as follows: "National Bureau of Standards, WWVH, when the tone returns Hawaiian Standard Time will be... hours, ... minutes". WWVB st. identification is transmitted by keyed 600cs modulation, giving the call sign in Intern. Morse Code on the h and every 20 min. thereafter. Immediately following this, the freq. offset is given in Intern. Morse Code by keyed 600cs modulation, the letter "M" indicating minus sign. Time signal modulation (DSB) includes precise second markers of a pulse of 5 cycles of 1kc. WWVL identifies by keyed carrier giving the call sign in Intern. Morse Code on the h and every 20 min. thereafter. Immediately following identification, the freq offset is given in Intern. Morse Code by keying the carrier, the letter "M" indicating the minus sign.
V. by QSL-card or letter. **Pub:** Prgr. sched. on request.
In addition to the 20kc carrier other exp. freq's near 20kc may be transmitted alternately or simultaneously.

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kc	m	kW		kc	m	kW	
2500	120	0.5	continuous*	10000	30	0.5	continuous*
60	5000	10	14.29–15.30	5000	60	0.5	continuous*

MFS Standard Freq. Sce: continuous* but transmission interrupted 6 times an h at min's 5–9½, 15–19½, 25–29½ etc.
Ann: Call sign. and freq. offset (in parts in 10^{10}) 3 times in slow morse, at min's 9½–10, 19½–20, etc. in each h – **V.** by letter.

ROYAL GREENWICH OBSERVATORY

Addr: Time Dept, Herstmonceux Castle, Hailsham, Sussex, England. The international t.s's are radiated by GBR (16kc) or reserve st. GBZ (19.6kc) at 03.00, 09.00, 15.00 & 21.00 and on high freq's at 09.00 and 21.00. The freq's used are selected according to current ionospheric predictions. Freq's available: GIC24 4025kc, GAY25 5807kc, GIC26 6985kc, GIC27 7397.5kc, GIC29 9350kc, GPB30B 10331.5kc, GPB30 10332.5kc, GKU5 12790kc, GIC33 13555kc, GIC37 17685kc, GIA39 19640kc.

HBN NEUCHATEL OBSERVATORY

Addr: Neuchatel, Switzerland. **Cable:** Observatoire. **Te:** (038)-5-1238. **L.P:** Dir: J. Bonanomi, W. Schuler – On 5000kc all day long:
Prgr. of tr: continuous tr. interrupted every 5 min. for 5 min. according to the following schema: 00m 00s – 04m 50s silence, 04m 50s – 05m 00s HBN (A_2), 05m 00s – 10m 00s carrier tr. with seconds pulses, 10m 00s – 14m 50s silence, etc – Within the h, the tr. is the following: Minutes 0–5 silence, 5–10 carrier and seconds pulses, 10–15 silence, 15–20 carrier and seconds pulses, 20–25 silence, 25–30 carrier and seconds pulses, 30–35 silence, 35–40 carrier and seconds, 40–45 silence, 45–50 carrier and seconds, 50–60 silence.

TIME SIGNAL FROM DOMINION OBSERVATORY

Addr: 3, Observatory Crescent, Ottawa 4, Ontario, Canada. **Te:** 232-8211 – **L.P:** Adm: Dr. J. Hodgson. Dir. Tec: M. M. Thomson.
Stations: CHU 3330kc 90.09m 3kW – 7335kc 40.90m 3kW – 14670kc 20.45m 3kW – **T.S:** Continuous in voice and second pulses – **Ann:** English: "CHU Canada, Eastern Standard Time". French: "CHU Canada, Heure normale de l'est" – **V.** by QSL-card. Re. welcomed – **Pub:** Prgr.schedule free.

STATION JJY

Addr: Radio Research Laboratories, Koganei, Tokyo, Japan. **Te:** (0423)-8-1661 – All st's 2kW nd, 24 h: 2500kc – 5000kc – 10000kc – 15000kc.
All standard freq's are interrupted at 29–39 min. past each h. Mod. seconds pulses of 8 cycles of 1.600c/s, and 1,000c/s tone – **V.** by QSL-card. Re. to Standard Freq. Section, R. Research Laboratories, Kokubunji P.O, Koganei-shi, Tokyo, Japan.

STATION LOL

Addr: Observatorio Naval de la Secretaria de Marina Costanera Sud, Buenos Aires – **L.P:** Dir. Gen: J. Marpegán.
Standard Freq. and Signals: 5000kc 2kW – 10000kc 2kW – 15000kc 2kW – **D** 11.00–12.00, 14.00–15.00, 17.00–18.00, 20.00–21.00, 23.00–24.00, 15 Oct. to last Feb; **D** 12.00–13.00, 15.00–16.00, 18.00–19.00, 21.00–22.00, 00.00–01.00 1 March to 14 Oct. – **Schedule:** 4 min. dash (1000 or 440cs alternately) beginning at 00.00, 00.05, 00.10 etc. Then 3 × LOL in morse followed by ann. T.S. transmission at min. 55–59 in each h.

STANDARD FREQUENCY STATION OMA

Addr: Budecska 6, Praha 2, Vinohrady, Czechoslovakia. **Te:** 258757 – **L.P:** Dir: B. Sternberk.
Stations: OMA 50kc 5kW: 24 h – OMA 2500kc 1kW: 24 h – OLB5 3170kc 8kW: 18.00–05.00 – OLD2 18985kc 8kW: directed to F. East, Wed, Fri 12.30–13.00 – **Ann:** In morse-code – **V.** by letter. Re. wanted.

NATIONAL RESEARCH CENTRE OF TELECOMMUNICATIONS

Addr: Centre National d'Etudes des Télécommunications, Laboratoire de Bagneux, 196, rue de Paris, Bagneux (Seine), France. FFH: 2500kc 0.25kW: Tues & Fri 08.30–16.30.

REP. OBSERVATORY SOUTH AFRICA

Addr: Republic Observatory, Johannesburg. Tel. 43-2026. **Cable:** Astronomer – **L.P:** Dr. W. S. Finsen – **Stations:** Call ZUO: Olifantsfontein 5000kc 4kW – Johannesburg 10000kc 0.25kW – Johannesburg 100Mc 0.050kW directional. 24 h per day, exc. for interruptions 15 to 25 min. past each h.
Time Signals: Continuous second pulses, consisting of 5c/s of 1000c/s tone. The minute pulse is prolonged to about ½ second – **Ann:** In morse code every 15 min's (just before each quarter hour): ZUO, ZUO, ZUO followed by the Universal time of the next minute – **V.** by letter will be answered if they are genuine reports – **Pub:** Monthly bulletin of time and freq. correction.

RWM, MOSCOW, USSR

Addr: Ministere des Comm. postales et electriques, Moscow.
Stations: All 20kW: 5000kc 05.00–08.00, 17.00–06.00 – 10000kc 13.00–16.00 – 15000kc 01.00–04.00, 08.30–13.06.

ATA, NEW DELHI, INDIA

Addr: National Physical Laboratory, New Delhi.
Stations: 10000kc 2kW: Mon–Fri 05.30–07.30.

BPV, PEKING, CHINA

Addr: BPV, Peking – **Stations:** 5000–10000–15000kc 24 h daily.

IAM, ROME, ITALY

Addr: Istituto Superiore, Ministero P. T, Rome.
Station: 5000kc 1kW – All days exc. Sun 07.30–08.30.

IBF, TURIN, ITALY

Addr: Istituto Elettrotecnico Nazionale, Corso Massimo d'Azeglio 42, Turin – **Station:** 5000kc 0.3kW W 06.50–07.30, 10.50–11.30.

ZLFS, LOWER HUTT, NEW ZEALAND

Addr: Physics & Engineering Laboratory, Lower Hutt, New Zealand.
Station: 2500kc 0.3kW: CW only Tues 01.00–04.00.

DCF77, MAINFLINGEN, GERMANY

Addr: Physikalisch-Technische Bundesanstalt, Braunschweig, Bundesallé 100, Fed. Rep. of Germany. **Cable:** "Bundesphysik". **Te:** 5921 – **L.P:** Pres: Prof. Dr. Ing. Kersten. Dir. of Dept. I: Prof. Dr. U. Stille. Dir: Dr. U. Adelsberger, Dr. Ohl, Dr. Süss.
Station: DCF77 77.5kc 12kW, nd W transm. extends essentially from 06.45–10.35, 19.00–20.10. Call-sign DCF77 in morse-code, amplitude modulation 440cs.

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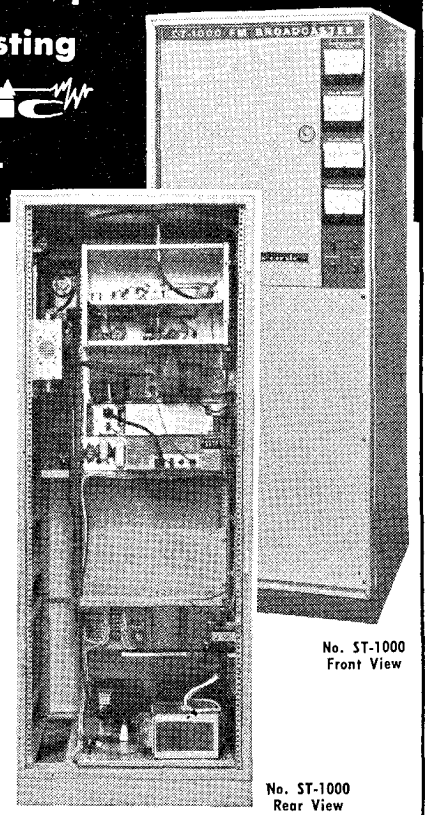

No. ST-1000
Front View

No. ST-1000
Rear View

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From 10-watt Exciter to 1000-watt Final without intermediate amplification stages

- Single tube final
- Maximum high voltage—2200 volts
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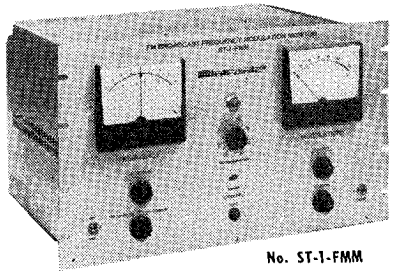

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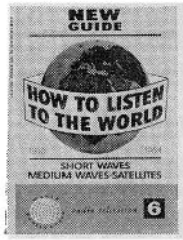

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WORLD PUBLICATIONS,
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DX-PROGRAMMES

All programmes in English exc. where indicated.

AUSTRALIA: R. Australia: "Australian DX'ers calling": Sat 19.00, 22.00, Sun 05.00, 07.15 (Apr–Oct), 09.00 (Oct–Apr), 13.00, 15.30, Mon 02.15. **Japanese:** "DX-Time": Sun 10.45 – **Associated Broadc. Services Ltd. (3UL):** "World at your fingertips" Sat 00.30.

BULGARIA: R. Sofia: Fri 19.30, 21.30, Sat 01.00, 04.00. **German:** 1st & 3rd Sun 20.00. **French:** 1st Sun 21.00. **Spanish:** 2nd Thurs of the month at 20.30, 22.30, Fri 00.00.

CANADA: Canadian Broadc. Corpo: "R. Canada Shortwave Club": Sat 12.20, 18.52, 21.35, 23.20, Sun 07.25, 08.10. **German:** Sun 18.00. **French:** Sat 19.50, 20.35.

CZECHOSLOVAKIA: R. Praha: "Around the World": 1st and 3rd Mon 19.00, 22.00. For No. America: On alternate Fri. 01.00 & 03.30 (repeated on Mon). For Far East & Australia alternate Fri (Mon) 08.00. **Swedish:** Thurs 16.30, Fri 10.00 (repeat). **German:** 1st Thurs at 19.00. For Austria: Every 3rd Sun at 11.00, repeated Mon 17.15, Tues 11.00.

DENMARK: Voice of Denmark: Tues 19.20, 20.35, Wed 02.20, 12.50, Thurs 09.50, 15.20.

FINLAND: Finnish Broadcasting Co: 1st & 3rd Fri 16.00, 21.00 (Sept–May); Fri 20.30, 1st & 3rd Sat 12.15 (May–Sept).

ECUADOR: The Voice of the Andes: "DX Party Line" 1st and 3rd Mon 02.30, 1st and 3rd Wed 09.30.

GERMANY: Deutsche Welle: 2nd Mon/Tues 08.00, 11.00, 14.05, 17.15, 18.30, 20.20, 23.45, 01.15, 03.00, 04.15 – **Sender Freies Berlin:** "Kurzwellenbummel" 1st Sat 21.15 (prgr. II) – **R. Berlin International:** Sat 17.00, 19.45 (Swedish).

GREAT BRITAIN: B.B.C: "Shortwave Listeners Corner": Wed 00.30, Fri 09.35, 16.45, Sun 08.30 (Pacific Sce).

HAITI: R. 4VEH: "DX-Corner" Fri 12.15.

HOLLAND: R. Nederland Wereldomroep: "DX Juke Box" Thurs 07.12, 14.12, 20.12, 21.12, Fri 04.12. **Afrikaans:** Fri 16.00.

HUNGARY: R. Budapest: Tues 19.30, Sun 22.00, 23.30, Wed, Mon 00.30, 03.00.

JAPAN: R. Japan: "DX-News" every 4th Sat 08.30, 10.15, 15.45, 17.55, Sun 00.45, 03.45, 06.00, 13.00, 15.15, Fri 19.20.

KOREA (Rep): KBS: Last Thurs at 03.15, 05.15, 06.45, 10.45, 15.45, 21.15.

NEW ZEALAND: R. New Zealand: "Arthur Cushens DX-World": 1st Wed 06.40, 10.30+following Sun 01.00.

PHILIPPINES: FEBC: "Listeners Corner": Mon–Fri 23.45, Tues–Sat 01.45 – "Shortwave Mailbag": Mon 09.15, Wed 13.30.

POLAND: Polskie Radio: 2nd Fri 18.30 and following Mon 21.30. **Swedish:** Thurs 17.30, 21.30. **Danish:** Wed (fortnightly) 16.30, 19.30.

PORTUGAL: Emissora Nacional: "R. Portugal DX-Club": Every 2nd Fri 18.15, 23.00. Every 2nd Mon. 02.15, 04.15.

RUMANIA: R. Bucharest: Every Fri 16.00, 22.30, Sat 01.30, 04.30. **German:** Every Wed 22.00.

SWEDEN: R. Sweden: "Sweden Calling DX'ers": Tues 12.30, 14.00 14.45, 16.15, 19.45, 22.00, 23.30, Wed 01.45, 03.15 as last part of English half h. Every Wed in German 19.15, 21.30, 23.00. Every Sat in French 17.45, 20.30, 21.45.

SWITZERLAND: Swiss Shortwave Service: "Swiss Short-wave Merry-Go-Round": Sat (in all english tr's): 07.45, 09.30, 12.30, 13.45, 15.30, 19.15, Sun 01.45.

USA: R. New York Worldwide: "DX-ing Worldwide": Sat 19.00 – **V.O.A:** "Radio Amateurs Notebook" Sun 07.30 (Europe/Africa/Asia), 08.00 (We. Africa), 08.45 (Austr./N.Z./Asia), Sun 22.45 (Europe), Mon 03.30 (Latin America). **Spanish** (for Latin America) Sun 04.10, 12.45.

U.S.S.R: R. Moscow: "DX-Club" Sun 23.15, Mon 03.15.

ESPERANTO

AUSTRIA: Österreischer Rundfunk: Vienna II Tues 16.50–17.00 (news) on 520/584/1052/11785kc.

BRAZIL: R.Dif. Educativa, Rio de Janeiro: Sat 18.30–19.00 (course & news) on 800/11950/17875kc – **R. Progreso,** São Paulo: Fri 23.30–24.00 on 4775kc – **R. Industrial,** Juiz de Fora: Mon 00.45–01.00 on 4925kc.

BULGARIA: R. Sofia: Sun 19.00–19.25.

CZECHOSLOVAKIA: R. Prague: Last Thurs 17.45; last Fri 10.00.

GUATEMALA: La Voz de Guatemala: Wed 23.00–23.25 (news) on 640/6180kc.

HOLLAND: Hilversum II: Fri 22.45–22.55 (news) on 1007kc, first Mon 22.40–23.00 on 1007kc.

ITALY: RAI, Rome: Tues, Wed, Fri 17.55–18.10 (talk).

POLAND: Polskie Radio: Warsaw: D 15.30–16.00 (news & prgr); **Gdánsk:** Mon 06.00–06.25 (news & course) on 1304kc; **Lódz:** Mon 19.30–19.55 on 1367/1484kc; **Lódz II:** Wed 15.05–15.25 on 1367kc

SPAIN: R. Valencia: Thurs 23.00–23.10 (talk) on 1554kc.

SWITZERLAND: SBC, Berne: Mon, Wed 12.10–12.25 (commentary); Thurs, Sat 21.15–21.25.

YUGOSLAVIA: R. Zagreb: Thurs 23.05–23.20 on 1133kc; **R. Beograd:** Thurs 23.05–23.20 (news & prgr) on 683/6150kc.

Note: For shortwave frequencies which are seasonally changed, see the resp. countries.

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DX-EDITORS

1

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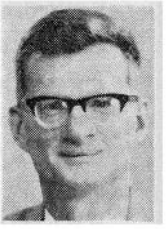
9

10

11

12

1) J. Vastenhoud, R. Nederland, Holland.

2) G. G. Thiele, Deutsche Welle, Germany.

3) Miss Kim, Hyun Sim, KBS Korea.

4) Han Choong Kwang, KBS, Korea.

5) Eric Gagneur, Finnish Broadcasting Co., Finland.

6) S. B. Duke, Radio Canada, International Service, Canada.

7) Graham D. Hutchins, Radio Australia, Australia.

8) P. Skala, R. Prague, Czechoslovakia.

9) Clayton Howard, The Voice of the Andes, Ecuador.

10) Ronald Green, SBC European & Overseas Service, Switzerland.

11) W. Hess, Radio Berlin International, German Democratic Rep.

12) Dick Platt, Voice of Denmark, Denmark.

Below right:

Arthur Cushen reading from a braille script during the recording of his session "Arthur Cushen's DX World," broadcast by Radio New Zealand, three times each month.

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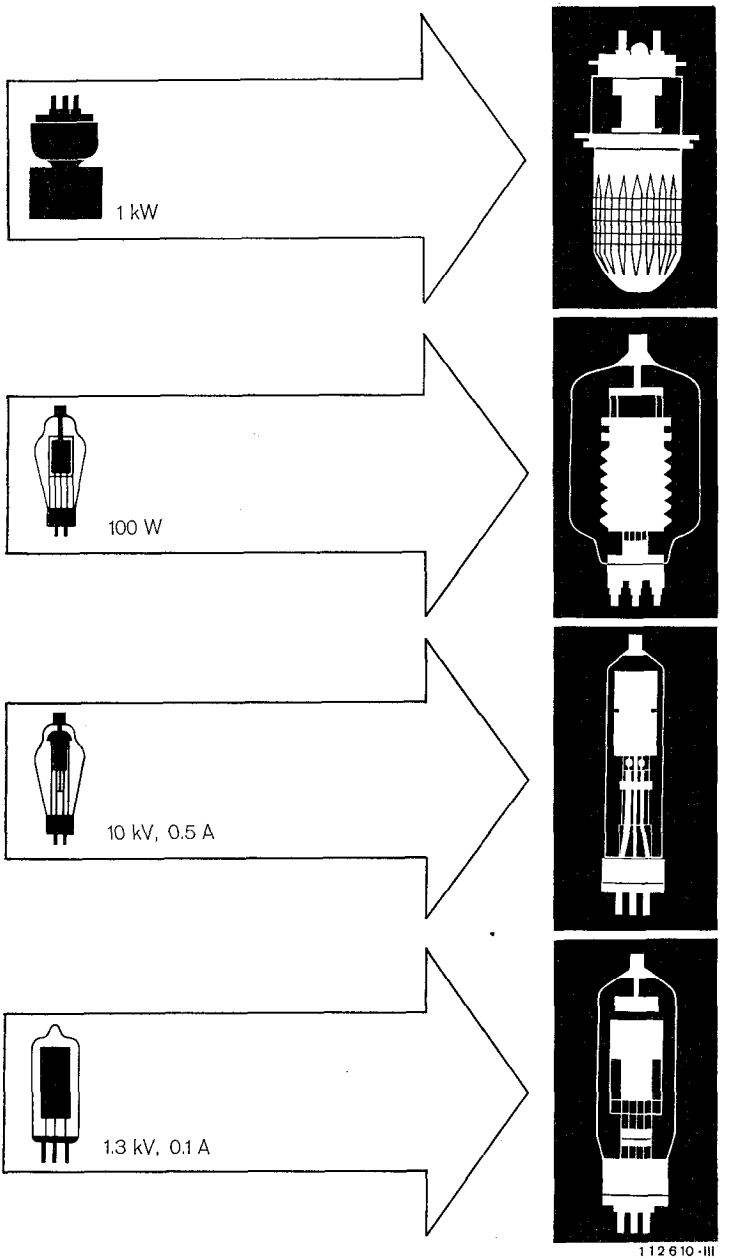

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NEWS IN ENGLISH

in the Foreign Services of shortwave stations

Abbreviations see page 82 : * = News summaries – [1] = Sun only – [2] = Sat – [3] = Tues, Thurs, Sat – [4] = Mon–Fri – [5] = Mon. only – [6] = Tues–Sat – [7] = Mon, Wed, Fri.

00.00 AFRTS
BBC
Japan
Malaysia
Moscow
Norway[5]
Sofia
VOA
00.05 *Rome**
00.15 R. Australia
00.30 AIR
Budapest
Rome
00.40 R. Nederland(W)
R. New Zeeland
00.45 Pakistan
01.00 AFRTS
4VEH
Japan
Moscow
Peking
Prague
RBI
RNE
VOA
01.05 Rome*
01.16 Jordan
01.18 SBC
01.30 R. Australia
Bucharest
Budapest
FEBC
Lebanon
01.37 DW
01.45 Sweden
02.00 AFRTS
BBC
Denmark
Japan
Lisbon
Peking
RNE
VOA
Moscow
02.05 Rome*
02.30 R. Australia
RBI
Moscow
02.53 BCC
02.55 FEBC[1]
03.00 AFRTS
BBC
Bucharest
Budapest
Cuba
Japan
Moscow
Norway[4]
Peking
Pyongyang
RNE
Seoul
VOA
03.02 Argentina
03.05 Rome
03.15 Japan
Sweden
03.23 BCC
03.30 R. Australia
Budapest
Prague
03.45 Lisbon
RBI
04.00 AFRTS
R. Australia

04.00 BBC
FEBC[1]
Japan
Moscow
Nederland(W)
Sofia
VOA
04.05 Rome*
04.15 RBI
04.25 Thailand
04.30 AIR
R. Australia
Bucharest
Budapest
Hanoi
04.45 RBI
04.47 KGEI[6]
04.57 DW
05.00 R. Australia
AFRTS
BBC
Cuba
Japan
Moscow
Seoul
VOA
05.02 Rome*
05.15 Brazzaville
05.30 Japan
05.45 BBC
06.00 R. Australia
AFRTS
BBC
CBC
ELWA
Japan
Moscow
VOA
06.02 Argentina
06.07 DW
06.30 Cairo
FEBC[1]
RBI
Seoul
07.00 R. Australia
AFRTS
BBC
ELWA
Japan
Moscow
Nederland(W)
RBI
R. New Zealand
VOA
07.18 SBC
07.20 R. Ceylon
07.21 CBC
07.30 Malaysia
Warsaw
07.32 DW
08.00 AFRTS
Japan
Prague
VOA
08.02 DW
08.06 CBC
08.15 R. New Zealand[1]
08.30 Pakistan
Peking
Seoul
Warsaw
08.45 R. Australia
08.47 DW
09.00 R. Australia
AFRTS

09.00 Japan
Rome
VOA
09.03 SBC
09.15 BBC
09.20 Rome
09.30 Denmark[3]
Japan
09.35 R. Ceylon
10.00 R. Australia
AFRTS
Moscow
Hanoi
Japan
R. New Zealand
VOA
10.01 AIR
10.22 BCC
10.30 Kabul
Pyongyang
Seoul
Thailand
10.45 Rome
11.00 R. Australia
AFRTS
BBC
Brazzaville
CBC
ELWA
FEBC
Japan
Kabul
SABC
VOA
11.15 RRI
11.30 *Moscow*
12.00 R. Australia
Brazzaville
AFRTS
CBC
Japan
Moscow
Norway[1]
Prague
Peking
RBI
Warsaw
Tashkent
VOA
4VEH
12.03 SBC
12.16 CBC
12.30 Denmark
Japan
Moscow
Sweden
12.45 RBI
FEBC
12.55 WRUL, [2 4]
13.00 R. Australia
AFRTS
Brazzaville
BBC
Japan
Moscow
Warsaw
13.15 ETLF
13.18 SBC
13.30 Hanoi
Moscow
13.31 AIR
13.35 Pakistan
13.45 Cairo
Ankara

13.55 WRUL*
14.00 R. Australia
AFRTS
BBC
Brazzaville
Ghana
Japan
Kabul
Nederland(W)
Nigeria
Norway[1]
Peking
RBI
SABC[7]
Sweden
Tashkent
VOA
14.02 HCJB
14.15 Lisbon
14.30 *ETLF*
Moscow
14.45 Ghana
AIR
Japan
RRI
Sweden
14.55 WRUL[4]
15.00 R. Australia
AFRTS
Bucharest
Denmark[3]
Japan
Peking
VOA
15.03 SBC
15.12 DW
15.15 Japan
15.16 CBC
15.30 FEBC
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Belgrad
15.35 Rome
15.42 BCC
15.45 ETLF
15.52 DW
15.55 WRUL*
16.00 R. Australia
AFRTS
BBC
Hanoi
Japan
Norway[1]
Peking
Prague
RBI
SABC[1 2]
VOA
16.12 DW
16.15 Sweden
16.30 SABC
16.32 CBC
16.55 WRUL[2 3]
17.00 R. Australia
AFRTS
Brazzaville
ETLF
ELWA
Japan
17.00 Ghana
Nigeria
Peking
Syria

17.00 WRUL[1]
VOA
WINB
17.15 BBC
RBI
Thailand
17.25 Japan
17.30 RBI
Prague
Moscow
17.55 WRUL*
18.00 R. Australia
AFRTS
BBC
Cairo
Lisbon
Japan
Nigeria
Norway[1]
Peking
VOA
18.20 Rome
18.25 R. Addis Ababa
18.30 Belgrad
Ghana
Lebanon
Moscow
Warsaw
18.33 CBC
18.41 AIR
18.45 Abidjan
18.48 SBC
18.55 WRUL[4]
19.00 R. Australia
AFRTS
Denmark
ETLF
Japan
Moscow
Peking
Prague
Pyongyang
SABC
Warsaw
VOA
19.05 Sofia
Dar es Salaam
19.15 RRI
19.30 Brazzaville
Bucharest
Budapest
Sofia
Warsaw
Moscow
19.45 Sweden
19.46 AIR
19.55 WRUL*
20.00 R. Australia
AFRTS
BBC
Ghana
Iran
Japan
Nederland(W)
Norway[1]
Moscow
Pakistan
RBI
Tirana
VOA
20,05 WINB
20.10 Cuba
20.15 Denmark
Israel
RBI

20.20 RNE
20.22 DW
20.25 R. Addis Ababa
20.30 Peking
Warsaw
Moscow
20.44 Israel*
20.50 Cuba
Ghana
20.55 WRUL[4]
21.00 R. Australia
AFRTS
Baghdad
BBC
Bucharest
Cairo
CBC
Morocco
Moscow
Japan
Nederland(W)
SABC*
Seoul
VOA
WRUL[2]
21.12 DW
21.30 Ghana
Moscow
Peking
RBI
Sofia
Tirana
Warsaw
WINB
21.37 CBC
21.45 R. Australia
Cairo
21.55 WRUL[1]
22.00 AFRTS
BBC
Belgrad
Budapest
Ankara
Japan
Moscow
RBI
Sofia
Sweden
Warsaw
VOA
22.05 Rome*
22.30 BBC
Warsaw
KGEI[4]
22.45 R. Australia
22.55 WRUL[4]
23.00 AFRTS
BBC
Moscow
Japan
VOA
WRUL[3]
23.01 CBC
23.02 Argentina
23.05 Rome*
23.30 R. Australia
Budapest
FEBC
23.32 HCJB
23.55 WRUL*

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RADIO STATIONS BROADCASTING IN YOUR LANGUAGE

Stations in fat types use the mentioned language in the Home Service.
Abbreviations: CSR=Czechoslovak Radio – DLF=Deutschlandfunk, Germany – ENR=Emissora Nacional de Radiodifusao, Portugal – KBS=Korean Broadc. System – PR=Polskie R. – RTR=Radiodif. Televiziunea Romina – R.Lib=R. Liberty, Germany – TWR=Trans World R, Monaco – SBC=Swiss Broadc. Corp. – UNR=United Nations R. – Other abbreviations see page 82.

AFRIKAANS: BBC, R. Ned, Moscow, SABC, ELTF.

ALBANIAN: Albania, BBC, Greece, RNE, Moscow, Vatican, Yugoslavia, VOA.

AMHARIC (Ethiopian): BBC, Moscow, Vatican, Egypt, Ethiopia, ELWA, UNR.

ARMENIAN: R.Lib, USSR, Iran, VOA, TWR.

ARABIC: Albania, Bulgaria, CSR, ORTF, DW, RBI, R. Ned, Hungary, RAI, RTR, RNE, Moscow, Vatican, Yugoslavia, Algeria, Chad, Egypt, Ethiopia, Ghana, Guinea, ELWA, Libya, Mauritius, Maroc, Nigeria, Senegal, Somalia, Sudan, Tunisia, Zanzibar, Aden, Afghanistan, Bahrein, China, Taiwan, India, RRI, Iran, Israel, NHK, Jordan, Kuwait, Lebanon, Pakistan, Saudi Arabia, Syria, Turkey, Yemen, VOA, Cuba, TWR, SBC, UNR.

AZERBAIDJANIAN: R.Lib, USSR, Iran.

BENGALI: BBC, Moscow, China, India, NHK, Pakistan, VOA.

BIELORUSSIAN: R.Lib, RNE, USSR, Vatican, Poland.

BULGARIAN: Bulgaria, Albania, ORTF, DW, RFE, BBC, Greece, RAI, RNE, Moscow, Vatican, Yugoslavia, Turkey, VOA, TWR.

BURMESE: BBC, Moscow, Burma, China, AIR, Pakistan, FEBC, VOA.

CAMBODIAN: Cambodia, China, FEBC, Thailand, Vietnam, VOA.

CATALAN: Andorra, ORTF, Moscow, Spain.

CZECH: CSR, ORTF, DW, DLF, RFE, BBC, RAI, RNE, Moscow, Vatican, Yugoslavia, CBC, TWR.

DANISH: Denmark, RBI, RAI, PR, Moscow, Vatican, Greenland.

ESPERANTO: See page 64.

ESTONIAN: RNE, USSR, VOA, Vatican, TWR.

FINNISH: Finland, BBC, PR, Moscow, Tallinn.

FRENCH: Albania, Andorra, RTB, Bulgaria, CSR, ORTF, DW, DLF, Europe1, RBI, BBC, Hungary, RAI, Luxembourg, PR, ENR, RTR, RNE, Sweden, Moscow, Vatican, Yugoslavia, Algeria, Angola, Cameroon, R. Bangui, Chad, Comores, Congo, Dahomey, Egypt, Ethiopia, Gabon, Ghana, Guinea, Ivory Coast, ELWA, Malgasy Rep., Mali, Mauritius, Mauritania, Morocco, Niger, Nigeria, Réunion, Rwanda, Sénégal, Somalia, SABC, Togo, Tunesia, Upper Volta, Afghanistan, Cambodia, China, AIR, RRI, Iran, Iraq, Israel, NHK, KBS, Laos, Lebanon, FEBC, Syria, Turkey, Vietnam, ABC, New Caledonia, New Hebrides, Tahiti, Canada, St. Pierre, VOA, Cuba, Guadeloupe, Haiti, Martinique, Windward Islds, RAE, Fr. Guiana, TWR, UNR.

GERMAN: Albania, Austria, Belgium, Bulgaria, CSR, ORTF, Germany, BBC, Hungary, RAI, Luxembourg, PR, ENR, RTR, RNE, SBC, Sweden, Moscow, Alma-Ata, Vatican, Yugoslavia, Egypt, Afghanistan, China, NHK, Turkey, CBC, VOA, Costa Rica (TIFC), Haiti (4VEB), Mexico (XEPH), RAE, Brazil, Chile (R. Soc. Nac. Mineria), Colombia (HJCW), HCJB, Venezuela (YVMI), TWR, Peru (R. Corporacion).

GREEK: Albania, Bulgaria, CSR, ORTF, BR, HR, SDR, WDR, DW, Greece, BBC, Hungary, RAI, RTR, Moscow, Egypt, ELWA, Cyprus, Turkey, VOA, TWR.

GUJARATI: AIR, Pakistan, Kenya, Tanganyika, FEBC.

HAUSSA: DW, BBC, Moscow, Cameroon, Egypt, Ghana, Niger, Nigeria, Togo, China, VOA.

HEBREW (Yevrit): BBC, Israel, Jordan, TWR, Egypt, Syria.

HINDI: BBC, DW, Moscow, Tashkent, ELTF, Ceylon, China, AIR, RRI, NHK, Nepal, FEBC, VOA, Surinam.

HINDUSTANI: See URDU.

HUNGARIAN: CSR, ORTF, DW, DLF, RFE, BBC, Hungary, RAI, RTR, RNE, Moscow, Vatican, Yugoslavia, Israel, Turkey, CBC, VOA, TWR.

INDONESIAN: BBC, DW, Moscow, Egypt, China, AIR, RRI, NHK, Malaysia, FEBC, Sabah, Saudi Arabia, ABC, VOA, Taiwan, Pakistan, UNR, Surinam.

ITALIAN: Albanian, Bulgarian, CSR, RBI, DW, BR, HR, SDR, WDR, Saar, BBC, Hungary, RAI, PR, TWR, SBC, RTR, RNE, Moscow, Vatican, Egypt, ELWA, NHK, Somalia, Tunesia, China, Mexico (XEPH), Brazil, RAE, Colombia (HJCW), Venezuela (YVOC, YVKD), UNR.

JAPANESE: BBC, RAI, Moscow, Vatican, China, Japan, Ryukyu Islds, N. Korea, KBS, Taiwan, FEBC, Okinawa, N. Vietnam, ABC, Hawaii, KGEI(USA), VOA, Brazil, RAE, Taiwan.

KISWAHILI: RTB, BBC, DW, Moscow, Vatican, Burundi, Congo, Egypt, Ethiopia, Ghana, Kenya, ELWA, Rwanda, Tanganyika, Zanzibar, China, AIR, NHK, VOA, UNR.

KOREAN: BBC, Moscow, China, Taiwan, NHK, Korea, VOA.

KURDISH: Egypt, Iran, Iraq, USSR.

LAOTIAN: China, Laos, FEBC, N. Vietnam, Thailand, VOA.

LATVIAN: RNE, USSR, Vatican, VOA, TWR.

LITHUANIAN: RAI, RNE, USSR, Vatican, VOA.

MACEDONIAN: Bulgaria, RNE, Moscow, Yugoslavia.

MALAY: BBC, Moscow, Egypt, N. Borneo, Brunei, China, NHK, FEBC, Malaysia, Sarawak, Thailand.

NORWEGIAN: Norway, Moscow, Vatican, TWR.

OULOFF: Gambia, Mali, Guinea, Mauritania, Maroc, Mauritius, Sénégal.

PERSIAN: DW, BBC, RAI, RTR, Moscow, Yerevan, Tashkent, Egypt, Afghanistan, China, AIR, Iran, Israel, Pakistan, Turkey, TWR.

POLISH: RTF, DW, DLF, TWR, BBC, RAI, PR, RNE, Moscow, Vatican, Yugoslavia, Turkey, Moscow, Vilnius, CBC, VOA.

PORTUGUESE: Azores, CSR, RTF, DW, RBI, BBC, RAI, Portugal, RTR, SBC, RNE, Sweden, Moscow, Vatican, Cape Verde, Egypt, Ghana, Guinea, ELWA, Madeira, Mozambique, Senegal, China, NHK, Lebanon, Macau, Syria, Timor, CBC, VOA, KGEI, R. New York, Cuba, RAE, Brazil, Uruguay (CXA7), TWR, Venezuela (YVOS).

PUSHTU: Moscow, Egypt, Afghanistan, AIR, Pakistan.

RUMANIAN: RTF, DLF, DW, RFE, BBC, Greece, RAI, RTR, RNE, Moscow, Vatican, Yugoslavia, Israel, Turkey, VOA, TWR.

RUSSIAN: Albania, RTF, DW, R. Lib, BBC, RAI, RNE, USSR, Vatican, Yugoslavia, Afghanistan, China, Iran, Israel, NHK, KBS, FEBC, KGEI, VOA, CBC, HCJB, TWR, 4VEH, UNR.

SLOVAK: CSR, RTF, DW, RFE, BBC, RAI, RNE, Moscow, Vatican, Yugoslavia, CBC, VOA.

SLOVENE: Austria, DW, RAI, Moscow, Vatican, Yugoslavia, VOA.

SOMALI: BBC, Moscow, Egypt, Ethiopia, Somalia.

SERBO-CROAT: Albania, Bulgaria, CSR, ORTF, DW, DLF, Greece, BBC, TWR, RAI, RTR, RNE, Moscow, Vatican, Yugoslavia, China, Turkey, VOA.

SPANISH: Andorra, Bulgaria, Denmark, ORTF, SDR, BR, WDR, DW, RBI, BBC, R. Ned, Hungaria, RAI, PR, ENR, RTR, TWR, Spain, Sweden, Moscow, Vatican, Yugoslavia, Canary Islds, Egypt, Guinea, ELWA, Morocco, China, NHK, Jordan, KBS, Lebanon, Syria, CBC, VOA, KGEI, R. New York, Costa Rica, Cuba, Dominican Rep, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Puerto Rico, Argentina, Bolivia, Chile, Colombia, Ecuador, Paraguay, Uruguay, Venezuela, Neth. Antilles, Philippines (DXRZ).

SWEDISH: CSR, Finland, RAI, RBI, PR, Moscow, Sweden, Vatican, Riga, Tallinn, NHK, HCJB.

THAI: BBC, Egypt, China, NHK, FEBC, Thailand, Vietnam, ABC, VOA, UNR.

TAMIL: BBC, Moscow, ELTF, Ceylon, China, India, Malaysia, FEBC.

TURKISH: Bulgaria, BR, HR, SDR, WDR, DW, RAI, Greece, RTR, Moscow, Baku, Yerevan, China, Cyprus, Iran, Iraq, VOA, Turkey, Egypt.

URDU (Hindustani): BBC, DW, Moscow, Tashkent, Afghanistan, AIR, RRI, NHK, Pakistan, Saudi Arabia, Turkey, VOA, Iran (Zahedan), Burma, Kenya, Mauritius, Fiji Isl, Surinam, FEBC.

UKRAINIAN: R. Lib, RAI, RNE, USSR, Vatican, CBC, HcJB, VOA, CSR, PR, TWR.

VIETNAMESE: RTF, BBC, Moscow, China, Laos, Taiwan, NHK FEBC, Thailand, ABC, VOA, Vietnam.

YIDDISH: ORTF, RTR, Israel, USSR.

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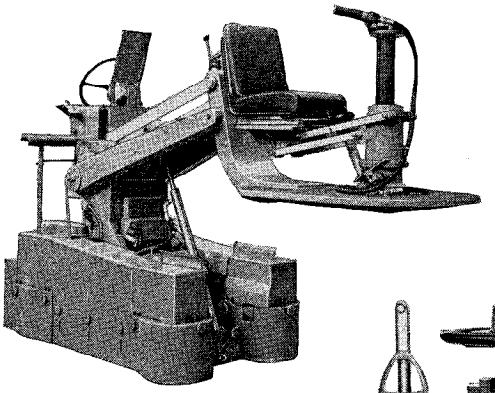
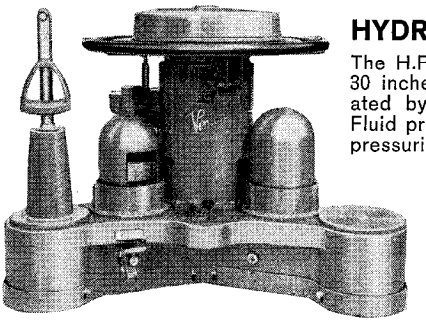


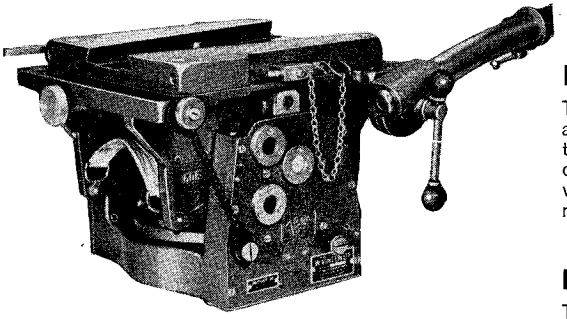
HERON CRANE

The most advanced camera crane in the world the Heron is fully mobile with all movements hydraulically controlled. Smooth, quiet running and two-man operation combine to make this the most versatile studio vehicle obtainable.



HYDRAULIC PEDESTAL

The H.P. Pedestal has a vertical travel of 30 inches, the centre column being operated by hydraulic rams in three stages. Fluid pressure is maintained by a nitrogen pressurized accumulator.



PAN AND TILT HEAD

The unique Vinten cam principle provides this head with a greater angle of tilt and perfect balance throughout the full range of tilt that is unobtainable with spring counter-balanced systems. Cameras up to 250 lb in weight can be safely carried and both pan and tilt movements are fitted with locks and friction adjustments.

FALCON O.B. DOLLY

The Vinten Falcon is designed to offer the producer of outside broadcasts equal camera mounting facilities to those in a studio. It can quickly be dismantled into four main sections for transportation and its light weight allows ease of handling in difficult environments. The Falcon offers camera shots previously unobtainable with existing equipment and combines this feature with smoothness, silence and rigidity.

Vinten

W. VINTEN LIMITED 713 NORTH CIRCULAR RD. NW2, ENGLAND. TEL: GLAdstone 6373

WORLD TIME IN ALL COUNTRIES

DIFFERENCE BETWEEN LOCAL TIME AND GREENWICH MEAN TIME

The differences marked + indicate the number of hours ahead of G. M. T. Differences marked ÷ indicate number of hours behind G.M.T.

	Normal clock Time	Summer Time
Aden	+3	+3
Afghanistan	+4½	+4½
Alaska[1]	÷8	÷8
Albania	+1	+1
Algeria	GMT	GMT
Andorra	+1	+1
Angola	+1	+1
Argentina	÷4	÷3 (Oct-Feb)
Australia		
a) Victoria New South Wales, Queensland, Tasmania, (Brisbane, Melbourne, Sydney)	+10	+10
b) N. Territory S. Australia	+9½	+9½
c) W. Australia	+8	+8
Austria	+1	+1
Azores	÷2	÷1 1/4-1/10
Bahamas	÷5	÷4
Bahrain	+4	+4
Barbados(W.I.)	÷4	÷4
Basutoland	+2	+2
Bechuanaland	+2	+2
Belgium	+1	+1
Bermuda	÷4	÷4
Bolivia	÷4	÷4
Brazil		
a) Eastern and Coastal.	÷3	÷2a
b) Manaos	÷4	÷3a
c) Acre	÷5	÷4a
Brunei	+8	+8
Bulgaria	+2	+2
Burma	+6½	+6½
Burundi	+2	+2
Cambodia	+7	+7
Cameroon	+1	+1
Canada		25/4-25/9
a) New Foundland	÷3½	÷2½
b) *Atlantic* (Labrador, Nova Scotia)	÷4	÷3
c) Eastern (Ontario) Quebec*	÷5	÷4
d) Central (Manitoba)	÷6	÷5
e) Mountain (Alberta)	÷7	÷6
f) Pacific (Br. Columbia)	÷8	÷7
g) Yukon	÷9	÷8
Canary Islands	GMT	GMT
Cape Verde Isl.	÷2	÷2
Central African Rep.	+1	+1
Ceylon	+5½	+5½
Chad	+1	+1
Chile	÷4	÷4
China		
Peoples Rep.	+8	+8
Shanghai	+8	+8
Canton	+8	+8
Lhasa	+6	+6
Urumchi	+6	+6
Taipei	+8	+9 1/16-30/9
Colombia	÷5	÷5
Comores Isl.	+3	+3
Congo, Rep.		
Leopoldville	+1	+1
Elisabethville	+2	+2
Congo (Brazzaville)	+1	+1
Cook Isl.	÷10½	÷10½
Costa Rica	÷6	÷6
Cuba (W.I.)	÷5	÷5
Curacao	÷4½	÷4½
Cyprus	+2	+2
Czechoslovakia	+1	+1
Dahomey	+1	+1
Denmark	+1	+1
Dominican Rep.	÷5	÷5
Ecuador	÷5	÷5
Egypt	+2	+3 1/5-30/9
El Salvador	÷6	÷6
Ethiopia	+3	+3
Falkland Islands	÷4	÷4
Faroe Islands	GMT	GMT
Fiji Islands	+12	+12
Finland	+2	+2
France	+1	+1
Gabon	+1	+1
Gambia	GMT	GMT
Germany	+1	+1
Gibraltar	+1	+1
Gilbert Isl.	+12	+12
Ghana	GMT	GMT
Great Britain	GMT	+1** 1/4-1/10
Greece	+2	+2
Greenland	÷3	÷3
Guadeloupe	÷4	÷4
Guam	+10	+10
Guatemala	÷6	÷6
Guiana (British)	÷3¾	÷3¾
Guiana (French)	÷4	÷4
Guinea	GMT	GMT
Guinea (Port.)	÷1	÷1
Guinea (Sp.)	+1	+1
Haiti (W.I.)	÷5	÷5
Hawaii	÷10	÷10
Holland	+1	+1
Honduras(Rep.)	÷6	÷6
Honduras (Brit.)	÷6	÷6
Hong Kong	+8	+9 1/4-31/10
Hungary	+1	+1
Iceland	÷1	GMT 3/4-31/10
India	+5½	+5½
Indonesia		
a)North Sumatra	+6½	+6½
b)South -	+7	+7
c)Java, Borneo, Bali	+7½	+7½
d)Celebes	+8	+8
e)Molucca Isl.	+8½	+8½
Iran (Persia)	+3½	+3½
Iraq	+3	+3
Ireland (Eire)	GMT	+1 15/4-15/10
Israel	+2	+2
Italy	+1	+1
Ivory Coast	GMT	GMT
Jamaica (W.I.)	÷5	÷5
Japan	+9	+9
Jordan	+2	+2
Kenya	+3	+3
Korea, Rep.	+9	+9
Korea,Dem.Rep.	+9	+9
Kuwait	+3	+3
Laos	+7	+7
Lebanon	+2	+3
Leeward Isl.	÷4	÷4
Liberia	÷¾	÷¾
Libya	+2	+2
Luxembourg	+1	+1
Macau	+8	+8
Madeira	÷1	GMT 1/4-1/10
Malawi	+2	+2
Malaya	+7½	+7½
Malagasy Rep.	+3	+3
Mali	GMT	GMT
Malta	+1	+1
Marshall Isl.	+12	+12
Martinique	÷4	÷4
Mauretania	GMT	GMT
Mauritius	+4	+4
Mexico[2]	÷6	÷6
Monaco	+1	+1
Mongolia(Outer)	+8	+8
Morocco	GMT	GMT
Mozambique	+2	+2
Nepal	+5.40	+5.40
Neth. Antilles	÷4½	÷4½
New Caledonia	+11	+11
New Guinea	+10	+10
New Hebrides	+11	+11
New Zealand	+12	+12
Nicaragua	÷6	÷6
Niger	+1	+1
Nigeria	+1	+1
Norfolk Isl.	+11½	+11½
Norway	+1	+2 25/4-19/9
Pakistan		
a) West	+5	+5
b) East	+6	+6
Panama	÷5	÷5
Papua	+10	+10
Paraguay	÷4	÷4
Peru	÷5	÷5
Philippines	+8	+8
Poland	+1	+2
Portugal	GMT	+1 1/4-1/10
Puert.Rico(W.I.)	÷4	÷4
Reunion	+4	+4
Rumania	+2	+2
Rwanda	+2	+2
Ryukyu Isl.	+9	+9
Sabah (Fed of Malaysia)	+8	+8
Samoa Isl.	÷11	÷11
S. Pierre	÷3	÷3
S. Tomé	GMT	GMT
Sarawak	+8	+8
Saudi Arabia	+3	+3
Senegal	GMT	GMT
Seychelles	+4	+4
Sierra Leone	GMT	GMT
Singapore	+7½	+7½
Solomon Isl.	+11	+11
Somali	+3	+3
So. Africa	+2	+2
So. Rhodesia	+2	+2
Spain	+1	+1
Sudan	+2	+2
Surinam	÷3½	÷3½
Swan Islands	÷6	÷6
Swaziland	+2	+2
Sweden	+1	+1
Switzerland	+1	+1
Syria	+2	+2
Tanganyika	+3	+3
Tahiti	÷10	÷10
Tasmania	+10	+10
Thailand	+7	+7
Timor	+8	+8
Togo	GMT	GMT
Tonga Islands	+13	+13
Trinidad(B.W.I.)	÷4	÷4
Tunesia	+1	+1
Turk&Caicos Isl	÷5	÷5
Turkey	+2	+2
Uganda	+3	+3
Upper Volta	GMT	GMT
Uruguay	÷3	÷3
U.S.S.R.		
Moscow, *Leningrad*	+3	+3
Baku	+4	+4
Sverdlovsk	+5	+5
Tashkent	+6	+6
Novosibirsk	+7	+7
Irkutsk	+8	+8
Yakutsk	+9	+9
Khabarovsk	+10	+10
Magadan	+11	+11
Petropavlovsk	+12	+12
Anadyr	+13	+13
U.S.A.		
a) Eastern Zone	÷5	÷4 1/5-1/10
b) *Central Zone*	÷6	÷5 1/5-1/10
c) MountainZone	÷7	÷6
d) Pacific Zone	÷8	÷7 1/5-1/10
Vatican	+1	+1
Venezuela	÷4½	÷4½
Vietnam (Rep.)	+8	+8
Vietnam (Dem. Rep.)	+7	+7
Virgin Isl.	÷4	÷4
West Papua	+9½	+9½
Windward Isl.	÷4	÷4
Yemen	+3	+3
Yugoslavia	+1	+1
Zambia	+2	+2
Zanzibar	+3	+3

* exc. the watch shore and Gaspé regions: 5 h. behind GMT.

** Summer Time in Britain starts at 02 hours GMT after the 3rd Sat. in Apr. (or 2nd Sat. if 3rd is Easter weekend) and runs until 02 h. GMT after the first Sat. in Oct. – a) Dec-March,

1) a) Ketchikan to Skagway ÷8
b) Skagway to 141°W. long ÷9
c) 141°W. long to 162°W. long ÷10
d) 162°W. long to Westernmost point (incl. Aleutians) ÷11

2) Generally ÷6
Lower Cal.
Pa. coast ÷7
No. part ÷8

Announcing an extraordinary achievement in amateur radio

THE NATIONAL HRO-500 RECEIVER

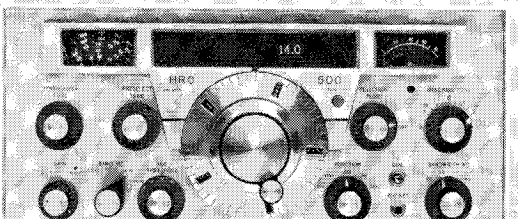
The National HRO-500 is the result of thirty years of "improvement of the breed". From the first HRO *Senior* of 1933 to the present, the HRO series has been almost legendary. The HRO-500 continues this proud tradition, and incorporates important technological advances resulting from National's leadership in the field of solid state physics, frequency standardization, and frequency synthesis.

By any criterion, the HRO-500 is extraordinary.

1. Design Concept: The HRO-500 is totally solid state. Frequency is determined by a phase-locked crystal synthesizer* feeding a VFO-controlled tunable IF. Similar circuit techniques are found only in advanced military communications equipment.
2. Reliability: The use of transistors throughout assures amazing reliability as a result of their enormously long life and minimum heat generation. The HRO-500 is hand-wired . . . compact . . . but *not* miniaturized.
3. Versatility: The HRO-500 may be operated anywhere . . . from flashlight cells, 12 volt car battery, or from 115V/230V 50/60 cycle sources. Total battery drain is less than that required for two dial lamps.
4. Frequency Coverage: *The HRO-500 covers the entire VLF through HF spectrum* . . . Five kilocycles through 30 Mc. in 60 synthesized 500 Kc bands, with equal stability and dial accuracy throughout its tuning range. No need to confine operation to ham bands only . . . the HRO-500 provides total coverage of MARS, commercial, foreign broadcast, marine, VLF communications, test and experimental frequencies. All required heterodyne frequencies are generated by the frequency synthesizer.
5. Dial Calibration and accuracy over *the entire tuning range* is one kilocycle, employing a linear VFO and National's famous PW epicyclic dial mechanism. 1 Kc divisions are ¼" apart, allowing easy interpolation to 200 cycles or better. VFO tuning rate is identical on all bands.
6. Stability: The HRO-500 employs a 500 Kc reference crystal standard, output of which is synthesized and phase-locked to produce crystal-stable high frequency oscillator signals. The VFO is electronically regulated. The use of transistors throughout practically eliminates internal heat generation. Long term stability from turn-on is better than 100 cycles over any ten-minute period, including supply voltage variation of ±10% and ambient temperature variations of 30° C.
7. Selectivity: The HRO-500 employs a *tunable* six-pole filter to meet any selectivity requirement. Bandwidths available are 500 cycles, 2.5 Kc, 5.0 Kc, and 8.0 Kc . . . the widest selectivity range of any amateur receiver. *Passband Tuning* in the 500 cycle and 2.5 Kc positions provides ease of sideband selection and adjacent channel interference rejection found in no other receiver manufactured today. A *Rejection Tuning* network allows rejection of interfering heterodynes by 60 db.
8. HRO-500 sensitivity and noise figure is substantially superior to the previous standard of comparison, all earlier HRO models!

Amateur net price will be approximately $1000.00, with delivery this fall. If your requirements demand the finest amateur receiver obtainable at *any* price, the National HRO-500 is your only choice.

*Patent Pending



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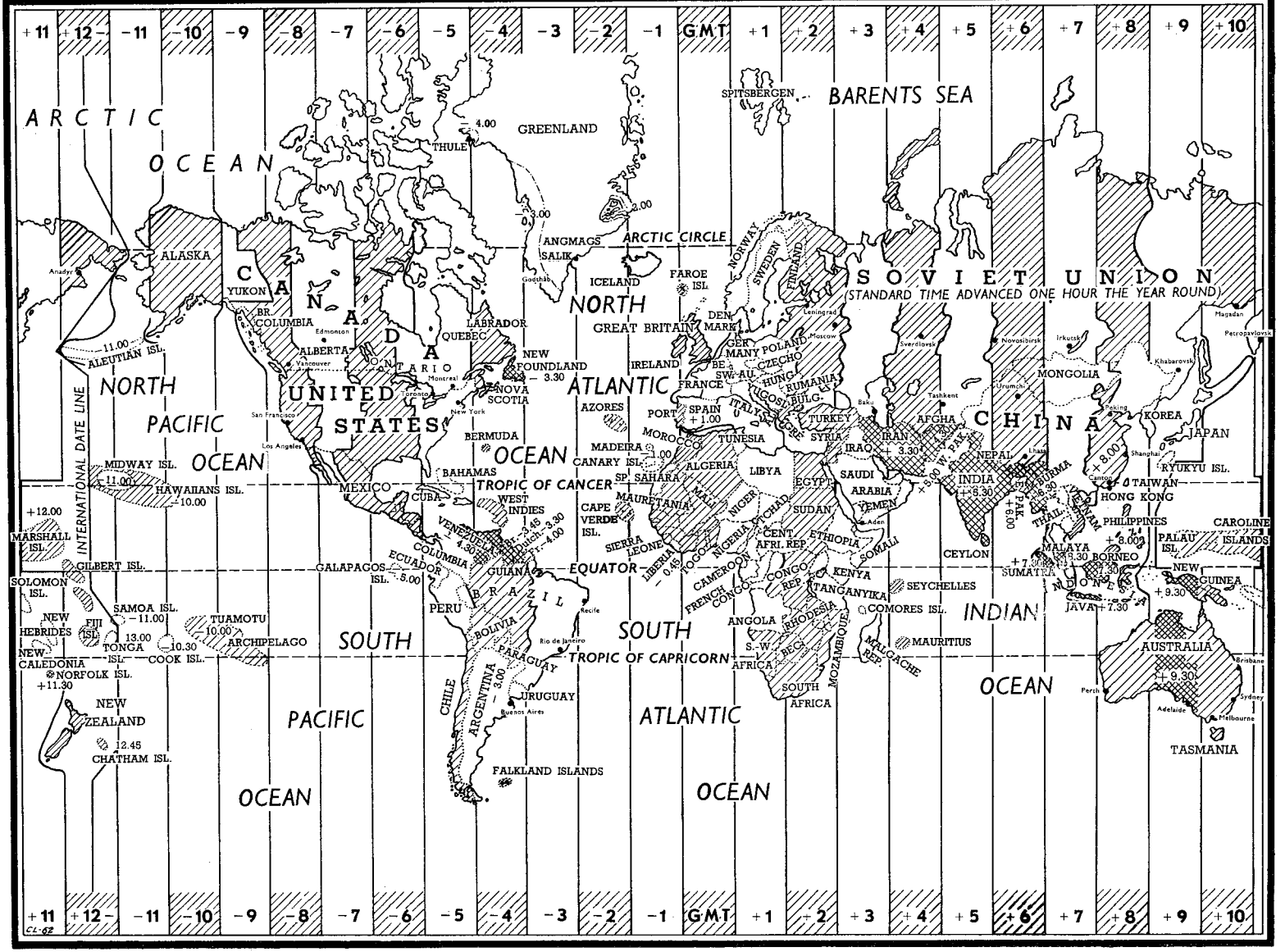
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FINLAND
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Sverdlovsk
Novosibirsk
Irkutsk
Magadan
Petropavlovsk
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LIBYA
EGYPT
TURKEY
SYRIA
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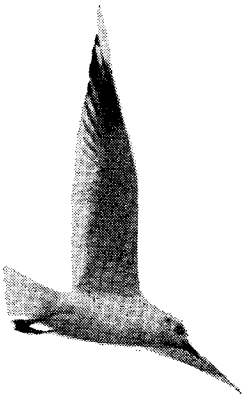
AFGHA
Baku
Tashkent
Urumchi
MONGOLIA
Peking
CHINA
KOREA
JAPAN
Shanghai
RYUKYU ISL.
TAIWAN
HONG KONG
PHILIPPINES
CAROLINE ISLANDS
PALAU ISL.
NEW GUINEA
MADEIRA +1.00
CANARY ISL.
SP. SAHARA
MAURETANIA
MALI
NIGER
CHAD
SUDAN
SAUDI ARABIA
YEMEN
Aden
INDIA +5.30
NEPAL
Lhasa
BURMA +6.30
THAILAND
VIETNAM
PAKISTAN +5.00 W. PAK.
+8.00
+6.00
+6.30
+8.00
+7.30
+9.30
+7.30
NORTH PACIFIC OCEAN
UNITED STATES
San Francisco
Los Angeles
MEXICO
BERMUDA
BAHAMAS
CUBA
WEST INDIES
TROPIC OF CANCER
CAPE VERDE ISL.
SIERRA LEONE
LIBERIA
TOGO
NIGERIA
CAMEROON
CENT. AFRI. REP.
ETHIOPIA
SOMALI
KENYA
CONGO REP.
TANGANYIKA
FRENCH CONGO
ANGOLA
RHODESIA
S.W. AFRICA
BECH.
MOZAMBIQUE
REP.
MALAGACHE
SEYCHELLES
COMORES ISL.
MAURITIUS
CEYLON
MALAYA
SUMATRA
BORNEO
JAVA +7.30
INDIAN OCEAN
AUSTRALIA
Perth
Adelaide
Brisbane
Sydney
Melbourne
TASMANIA
SOUTH AFRICA
VENEZUELA
COLUMBIA
ECUADOR
PERU
BOLIVIA
PARAGUAY
CHILE
ARGENTINA
URUGUAY
Buenos Aires
Rio de Janeiro
Recife
BRAZIL
GUIANA
Br. 3.45
Dutch 3.30
Fr. 4.00
4.30
5.00
EQUATOR
GALAPAGOS ISL.
TROPIC OF CAPRICORN
SOUTH PACIFIC OCEAN
SOUTH ATLANTIC OCEAN
FALKLAND ISLANDS
INTERNATIONAL DATE LINE
MIDWAY ISL. −11.00
HAWAIIANS ISL. −10.00
ALEUTIAN ISL. −11.00
+12.00
MARSHALL ISL.
GILBERT ISL.
SOLOMON ISL.
SAMOA ISL. −11.00
NEW HEBRIDES
FIJI ISL. 13.00
TONGA 10.30
TUAMOTU ARCHIPELAGO 10.00
COOK ISL.
NEW CALEDONIA
NORFOLK ISL. +11.30
NEW ZEALAND
12.45
CHATHAM ISL.
CL-62



The modest voice of nature

Gevasonor magnetic sound films

The song of a bird, the sound of a wave, the cry of a child. The endlessly changing din of a large city. The hundred or more instruments of a symphony orchestra. Capture them all with Gevasonor magnetic sound films.

In countless film studios all over the world, Gevasonor magnetic sound film has proved to be an invariably high class film which guarantees faithful reproduction, even of notes of the highest frequency. Polished Gevasonor film is suited for all recording apparatuses, including yours !

Gevasonor sound film is supplied in many types, including :

Type 2.01 : the standard magnetic sound film, fully coated with an iron oxide layer ; available in 35, 17,5 and 16 mm widths.

Type 2.02 : magnetic film, also fully coated with high output iron oxide and available in 35, 17,5 and 16 mm widths.

Type 2.21 : with magnetic track and balance stripe for the synchronisation of 35 mm film productions.

GEVASONOR FILM

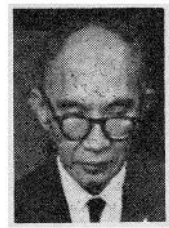
GEVAERT-AGFA N.V.
MORTSEL (ANTWERP) BELGIUM

GEVAERT

5523 Publicem

VOICES OF THE WORLD

1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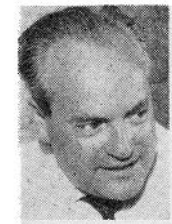
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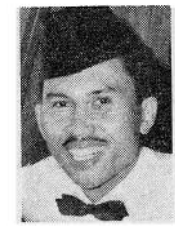
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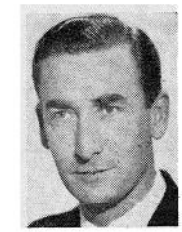

23

United Nations Radio: 1)–7) Announcers from various departments.

Radio Canada, Montreal: 8) Miss Giselle Theraux, well known through her prgr. "Coin des Auditeurs" – 9) Miss Maryse Reicher, French Sce – 10) Gerd Peter Pick, German Sce – 11) Miss Mercedes Palomino, Spanish Sce.

Swiss Broadcasting Corporation, Berne, Switzerland: 12) Nora Medina, Spanish Prgr – 13) Sylvia Gfeller, English Prgr.

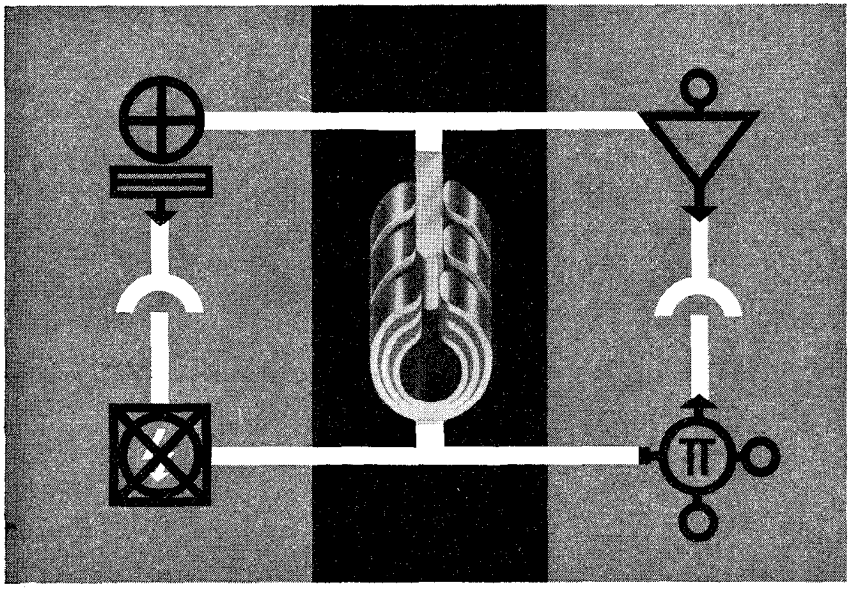
Far East Broadcasting Co., Manila, Philippines: 14) John Wheatley, English Prgr. "Short Wave Mailbag" – 15) Rudy Ford, Chief Announcer, English Sce – 16) Wajan Durya, Indonesian See.

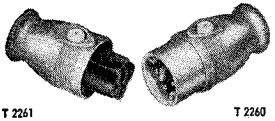
Radio Voice of the Gospel, Addis Ababa, Ethiopia: 17) Kenneth Stewart, Chief News Editor.

Voice of America, Washington, DC, USA.: 18) Lee Hall, English Sce. Editor – 19) Robert Berryman, Editor VOA News – 20) Larry Le Sueur, news analyst, commentator.

R. Nederland, Hilversum, Holland: 21) P. Bañados Montalva, Latin American section – 22) S. Pasariboe, Indonesian section – 23) Ph. Sherry, English section.

TUCHEL-KONTAKT





T 2261 T 2260

POWER CONNECTOR For Plug-in Electronic Equipment

Series	2 live, 1 grounding contact
Current rating per contact	25 amps
Voltage rating	250 vac
Terminals	Screw terminals accomodating cables up to 4 mm sectional Cable entry dia. 13 mm max.

It is the meaningful application of high grade individual components that makes electronics work. Assembled into racks — **as plug-in units** — they are well adapted to an easy and quick replacement whenever trouble will arise. Trouble shooting is simple, the source of troubles is quickly found, test results are unambiguous, production is economical. The **TK** DESIGN PRINCIPLE is consistent with the laws of physics, its precision means superior quality. The self cleaning multiple contact connectors are low-loss, vibration-proof and satisfactory even under all extremes of climate — theirs is an unsurpassed operating reliability. **The Plug-in Philosophy** signals technological progress; plug-in electronic units are the only solution to many problems of technology and economy — hence use plug-ins. **Where to provide plug-ins?** Applications may be found in any field of technology, in electronics as well as machinery. **When to provide plug-ins?** Right at the outset of the design project in order to provide a wider range of applications for your product and give it a „pre" over competitors. **What to provide with plug-ins?** Electronically controlled components for any machine — heavy machinery — electronic systems. **How to provide plug-ins?** By means of the **TK** DESIGN PRINCIPLE. Consult our experts.

Send for our Special Bulletin No **29**

TUCHEL-KONTAKT GMBH 7100 HEILBRONN/NECKAR, GERMANY

P. O. BOX 920 · TELEPHONE (07131) *88001 · TELEX 07/28816

THE TK DESIGN PRINCIPLE MEANS SAFETY

FREQUENCY BANDS ALLOCATED TO BROADCASTING, TELEVISION AND AMATEURS

The table is based upon the Geneva Regulations 1959. Some bands are shared with other services. In certain countries exceptions from the table below apply. **Region 1**: Europe, U.S.S.R. in Asia, Africa. **Region 2**: N. and S. America, Northeast Pacific. **Region 3**: Asia exc. U.S.S.R., Australia, N. Zealand, part of Pacific. [1]) Certain countries only, max 10W, special agreements.

	Region 1 kc	Region 2 kc	Region 3 kc
BC	150–285		
BC	525–1605	525–1605	525–1605
AMAT	1715–2000[1])	1800–2000	1800–2000
BC(trop)	2300–2498	2300–2495	2300–2495
BC(trop)	3200–3400	3200–3400	3200–3400
AMAT	3500–3800	3500–4000	3500–3800
BC	3950–4000		3900–4000
BC(trop)	4750–4995	4750–4995	4750–4995
BC(trop)	5005–5060	5005–5060	5005–5060
BC	5950–6200	5950–6200	5950–6200
AMAT	7000–7100	7000–7300	7000–7100
BC	7100–7300		7100–7300
BC	9500–9775	9500–9775	9500–9775
BC	11700–11975	11700–11975	11700–11975
AMAT	14000–14350	14000–14350	14000–14350
BC	15100–15450	15100–15450	15100–15450
BC	17700–17900	17700–17900	17700–17900
AMAT	21000–21450	21000–21450	21000–21450
BC	21450–21750	21450–21750	21450–21750
BC	25600–26100	25600–26100	25600–26100
AMAT	28000–29700	28000–29700	28000–29700

	Region 1 Mc West	Region 1 Mc East	Region 2 Mc	Region 3 Mc
BC(TV)	41–68	41–66		44–50
AMAT			50–54	50–54
BC(TV)			54–72	54–68
BC(TV)			76–88	
BC(FM)	87.5–100	66–73	88–108	87–108
BC(TV)		76–100		
AMAT	144–146		144–148	144–148
BC(TV)	174–216		174–216	170–216
AMAT			220–225	
AMAT	430–440		420–450	420–450
BC(TV)	470–960		470–890	470–585
BC(TV)				610–960
AMAT	1215–1300		1215–1300	1215–1300
AMAT	2300–2450		2300–2450	2300–2450
AMAT			3300–3500	3300–3500
AMAT	5650–5850		5650–5925	5650–5850
AMAT	10000–10500		10000–10500	10000–10500
BC	11700–12700		11700–12700	11700–12700
AMAT	21000–22000		21000–22000	21000–22000

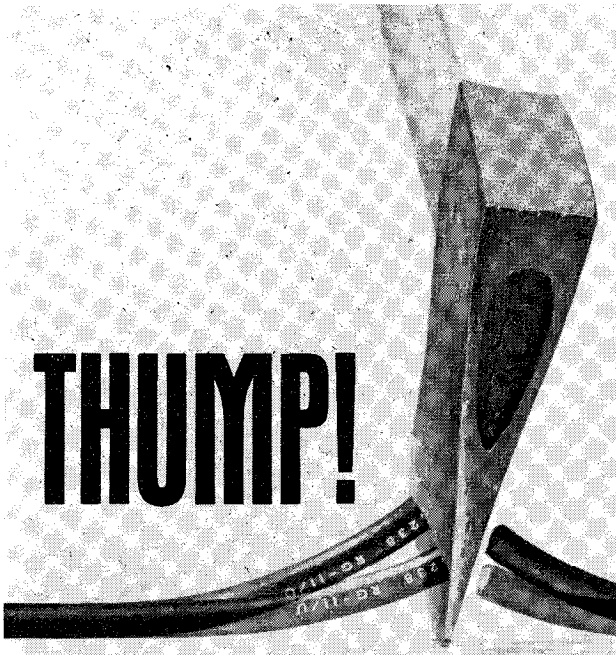
CALL SIGN ALLOCATIONS (by alphabetical order of call signs)

The first character or the first two characters of a call sign indicates the nationality of the station using it.

AAA-ALZ USA
AMA-AOZ Spain
APA-ASZ Pakistan
ATA-AWZ India
AXA-AXZ Australia
AYA-AZZ Argentine
BAA-BZZ China
CAA-CEZ Chile
CFA-CKZ Canada
CLA-CMZ Cuba
CNA-CNZ Morocco
COA-COZ Cuba
CPA-CPZ *Bolivia*
CQA-CRZ Portug. prov.
CSA-CUZ Portugal
CVA-CXZ Uruguay
CYA-CZZ Canada
DAA-DTZ Germany
DUA-DZZ Philippines
EAA-EHZ Spain
EIA-EJZ Ireland
EKA-EKZ USSR
ELA-ELZ Liberia
EMA-EOZ USSR
EPA-EQZ Iran
ERA-ERZ USSR
ESA-ESZ USSR (Estonia.)
ETA-ETZ Ethiopia
EUA-EWZ USSR (Bielorussia)
EXA-EZZ USSR
FAA-FZZ France & terr.
GAA-GZZ U.K.
HAA-HAZ Hungary
HBA-HBZ Switzerland
HCA-HDZ Ecuador
HEA-HEZ Switzerland
HFA-HFZ Poland
HGA-HGZ Hungary
HHA-HHZ Haiti
HIA-HIZ Dominican Rep.
HJA-HKZ Colombia
HLA-HMZ Korea Rep.
HNA-HNZ Iraq
HOA-HPZ Panama
HQA-HRZ Honduras Rep.
HSA-HSZ Thailand
HTA-HTZ Nicaragua
HUA-HUZ El Salvador
HVA-HVZ Vatican State
HWA-HYZ France & terr.
HZA-HZZ Saudi Arabia
IAA-IZZ Italy[1]
JAA-JSZ Japan
JTA-JVZ Mongolia
JWA-JXZ Norway
JYA-JYZ Jordan
JZA-JZZ We. New Guinea
KAA-KZZ USA
LAA-LNZ Norway
LOA-LWZ Argentine
LXA-LXZ Luxembourg
LYA-LYZ USSR (Lithuania)
LZA-LZZ Bulgaria
MAA-MZZ U.K.
NAA-NZZ USA
OAA-OCZ Peru
ODA-ODZ Lebanon
OEA-OEZ *Austria*
OFA-OJZ Finland
OKA-OMZ Czechoslov.
ONA-OTZ Belgium
OUA-OZZ Denmark
PAA-PIZ Netherlands
PJA-PJZ Neth. Antilles
PKA-POZ Indonesia
PPA-PYZ Brazil
PZA-PZZ Surinam
QAA-QZZ Sce. abbrev.
RAA-RZZ USSR
SAA-SMZ Sweden
SNA-SRZ Poland
SSA-SSM UAR
SSN-STZ Sudan
SUA-SUZ UAR
SVA-SZZ Greece
TAA-TCZ Turkey
TDA-TDZ Guatemala
TEA-TEZ Costa Rica
TFA-TFZ Iceland
TGA-TGZ Guatemala
THA-THZ France & terr.
TIA-TIZ Costa Rica
TJA-TJZ Cameroon
TKA-TKZ France & terr.
TLA-TLZ C. Africa
TMA-TMZ France & terr.
TNA-TNZ Brazzaville
TOA-TQZ France & terr.
TRA-TRZ Gabon
TSA-TSZ Tunisia
TTA-TTZ Tchad
TUA-TUZ Ivory Coast
TVA-TXZ France & terr.
TYA-TYZ Dahomey
TZA-TZZ Mali
UAA-UQZ USSR
URA-UTZ USSR (Ukr.)
UUA-UZZ USSR
VAA-VGZ Canada
VHA-VNZ Australia
VOA-VOZ Canada
VPA-VSZ British overseas terr.
VTA-VWZ India
VXA-VYZ Canada
VZA-VZZ Australia
WAA-WZZ USA
XAA-XIZ Mexico
XJA-XOZ Canada
XPA-XPZ Denmark
XQA-XRZ Chile
XSA-XSZ China
XTA-XTZ Upper Volta
XUA-XUZ Cambodia
XVA-XVZ Vietnam
XWA-XWZ Laos
XXA-XXZ Portuguese overseas terr.
XYA-XZZ Burma
YAA-YAZ Afghanistan
YBA-YHZ Indonesia
YIA-YIZ Iraq
YJA-YJZ N. Hebrides
YKA-YKZ Syrian Arab Rep.
YLA-YLZ USSR (Latvia)
YMA-YMZ Turkey
YNA-YNZ Nicaragua
YOA-YRZ Roumania
YSA-YSZ El Salvador
YTA-YUZ Yugoslavia
YVA-YYZ Venezuela
YZA-YZZ Yugoslavia
ZAA-ZAZ Albania
ZBA-ZJZ U.K. overseas terr.
ZKA-ZMZ New Zealand
ZNA-ZOZ U.K. overseas terr.
ZPA-ZPZ Paraguay
ZQA-ZQZ U.K. overseas terr.
ZRA-ZUZ So. Africa
ZVA-ZZZ Brazil
2AA-2ZZ U.K.
3AA-3AZ Monaco
3BA-3FZ Canada
3GA-3GZ Chile
3HA-3UZ China
3VA-3VZ Tunisia
3WA-3WZ Vietnam
3XA-3XZ Guinea
3YA-3YZ Norway
3ZA-3ZZ Poland
4AA-4CZ Mexico
4DA-4IZ Philippines
4JA-4LZ USSR
4MA-4MZ Venezuela
4NA-4OZ Yugoslavia
4PA-4SZ Ceylon
4TA-4TZ Peru
4UA-4UZ U.N.
4VA-4VZ Haiti
4WA-4WZ Yemen
4XA-4XZ Israel
4YA-4YZ Int. Civil Aviation Org.
4ZA-4ZZ Israel
5AA-5AZ Libya
5BA-5BZ Cyprus
5CA-5GZ Morocco
5HA-5IZ Tanganyika
5JA-5KZ Colombia
5LA-5MZ Liberia
5NA-5OZ Nigeria
5PA-5QZ Denmark
5RA-5SZ Malagasy
5TA-5TZ Mauritania
5UA-5UZ Niger
5VA-5VZ Togolese
5WA-5WZ We. Samoa
5XA-5XZ Uganda
5YA-5ZZ Kenya
6AA-6BZ UAR
6CA-6CZ Syria
6DA-6JZ Mexico
6KA-6NZ Korea Rep.
6OA-6OZ Somaliland
6PA-6SZ Pakistan
6TA-6UZ Sudan
6VA-6WZ *Senegal*
6XA-6XZ Malagasy
6YA-6YZ Jamaica
6ZA-6ZZ Not allocated
7AA-7IZ Indonesia
7JA-7NZ Japan
7OA-7QZ Not allocated
7RA-7RZ Algeria
7SA-7SZ Sweden
7TA-7YZ Algeria
7ZA-7ZZ Saudi Arabia
8AA-8IZ Indonesia
8JA-8NZ Japan
8OA-8RZ Not allocated
8SA-8SZ Sweden
8TA-8YZ India
8ZA-8ZZ Saudi Arabia
9AA-9AZ San Marino
9BA-9DZ Iran
9EA-9FZ Ethiopia
9GA-9GZ Ghana
9HA-9JZ Not allocated
9KA-9KZ Kuwait
9LA-9LZ Sierra Leone
9MA-9MZ Malaya
9NA-9NZ Nepal
9OA-9TZ Léopoldville
9UA-9UZ Burundi
9VA-9WZ Not allocated
9XA-9XZ Rwanda Rep.
9YA-9ZZ Not allocated

[1] and Terr. under mandate U.N.

THUMP!



THE NEW FREEDOM

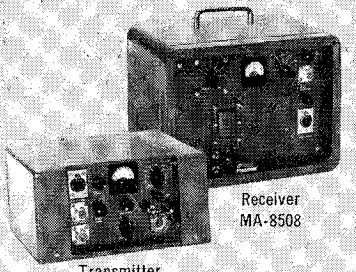
Microwave Associates — an established major U.S. supplier of communications and defense equipment — applies its solid state-of-the-art know-how to a new series of mobile TV equipment for broadcasters.

A complete transmitter and receiver microwave link — rugged, small enough to carry easily, powerful enough to transmit 12 miles without boosters, sufficiently self-contained to operate with battery pack — offers unmatched programming coverage at a small fraction of weight and power consumption of klystron transmitters and receivers.

At the 1964 political conventions, major TV networks used this equipment for remote live pickup — by helicopter, crash truck, even on foot. Outstanding for "live" coverage of sporting events or news.

Used back-to-back, the receiver-transmitter combination can serve as an unattended relay. Traveling wave tube boosters extend the range to as much as 50 miles. All equipment is full FM video and sound and meets appliçable CCIR and FCC requirements.

Write for complete details on these, rack mounted STL, and point-to-point relay equipment.



Receiver
MA-8508

Transmitter
MA-8507

AVAILABLE EQUIPMENT SUMMARY

Frequency	Transmitters	Receivers	TWT Power Boosters
1.990–2.110Gc	MA-8507 7 channels 1 watt output	MA-8508 7 channels Crystal Controlled	MA-8509 10–20 watts output
6.325–6.525Gc or 6.875–7.125Gc (Specify Band)	MA-8517 400 mW output	MA-8516 Crystal Controlled	MA-8518 20 watts output
		MA-8521 TDO Equipped — Tuneable 12; 24 VDC, 110 VAC Compatible KTR — 1000G or R.C.A.	
11.7–12.2Gc or 12.7–13.2Gc (Specify Band)	MA-8514 75m watts output (Development)	MA-8512 Crystal Controlled (Development)	MA-8513 10–15 watts output

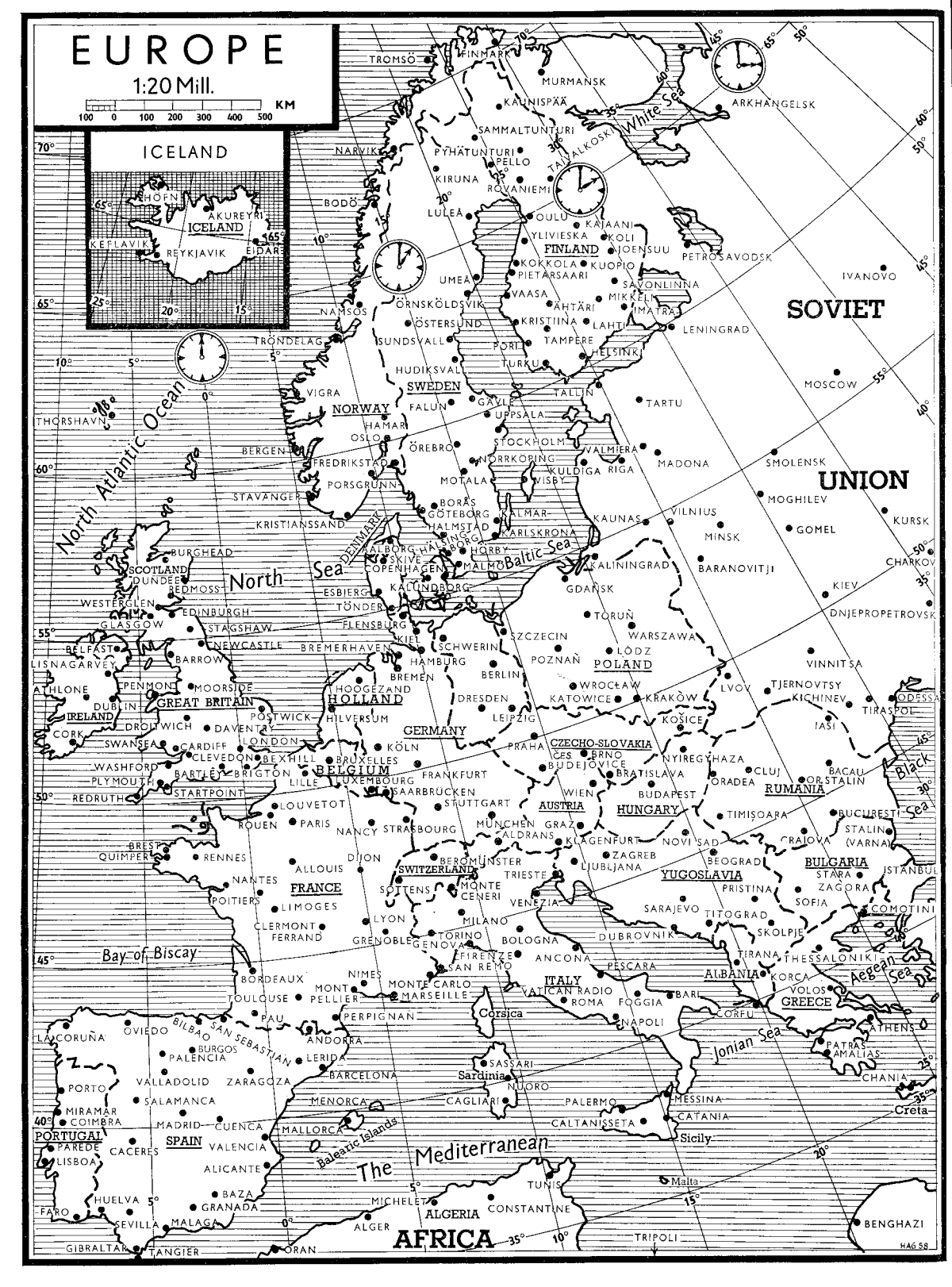
Recommended accessories including tripods, antennas, batteries, cables also available.

MICROWAVE ASSOCIATES, INC.

BURLINGTON, MASS. • WESTERN UNION FAX
TWX: 617-272-1492 • TEL: 617-272-3000

Overseas Sales: Microwave Associates International, Inc.
Burlington, Massachusetts

United Kingdom Sales: Microwave Associates, Ltd.
Cradock Road, Luton, Beds, England


EUROPE
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KM
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ICELAND
HÖFN
AKUREYRI
ICELAND
KEFLAVIK
REYKJAVIK
EIDAR
TROMSÖ
FINNMARK
MURMANSK
KAUNISPÄÄ
ARKHANGELSK
White Sea
SAMMALTUNTURI
PYHÄTUNTURI
PELLO
KIRUNA
ROVANIEMI
TAIVALKOSKI
NARVIK
BODÖ
LULEÅ
OULU
KAJAANI
YLIVIESKA
KOLI
JOENSUU
FINLAND
PETROSAVODSK
KOKKOLA
KUOPIO
PIETARSAARI
SAVONLINNA
IVANOVO
UMEÅ
VAASA
MIKKELI
ÖRNSKÖLDSVIK
ÄHTÄRI
IMATRA
SOVIET
NAMSOS
ÖSTERSUND
KRISTIINA
LAHTI
LENINGRAD
TRONDELAG
SUNDSVALL
PORI
TAMPERE
HELSINKI
HUDIKSVALL
TURKU
SWEDEN
TALLIN
MOSCOW
VIGRA
NORWAY
FALUN
GÄVLE
TARTU
THORSHAVN
HAMAR
UPPSALA
OSLO
STOCKHOLM
ÖREBRO
VALMIERA
BERGEN
NORRKÖPING
MADONA
SMOLENSK
FREDRIKSTAD
KULDIGA
RIGA
UNION
PORSGRUNN
MOTALA
VISBY
STAVANGER
BORÅS
MOGHILEV
GÖTEBORG
KALMAR
KAUNAS
VILNIUS
KURSK
KRISTIANSSAND
HALMSTAD
KARLSKRONA
MINSK
GOMEL
DENMARK
HALBORG
HÄRNÖSAND
HÖRBY
North Atlantic Ocean
BURGHEAD
SKIVE
MALMÖ
Baltic Sea
KALININGRAD
BARANOVITJI
CHARKOV
SCOTLAND
DUNDEE
COPENHAGEN
North Sea
BEDMOSS
ESBJERG
KIEV
WESTERGLEN
KALUNDBORG
GDAŃSK
EDINBURGH
TØNDER
TORUŃ
DNJEPROPETROVSK
GLASGOW
FLENSBURG
STAGSHAW
KIEL
SZCZECIN
WARSZAWA
BELFAST
NEWCASTLE
BREMERHAVEN
SCHWERIN
LISNAGARVEY
BARROW
HAMBURG
POZNAŃ
ŁÓDŹ
POLAND
VINNITSA
ATHLONE
PENMONT
MOORSIDE
BERLIN
WROCŁAW
TJERNOVTSY
DUBLIN
GREAT BRITAIN
HOOGEZAND
HOLLAND
DRESDEN
KATOWICE
KRAKÓW
LVOV
KICHINEV
ODESSA
IRELAND
POSTWICK
HILVERSUM
LEIPZIG
TIRASPOL
DROITWICH
DAVENTRY
GERMANY
KOŠICE
IAŞI
CORK
SWANSEA
CARDIFF
LONDON
KÖLN
PRAHA
CZECHO-SLOVAKIA
WASHFORD
CLEVEDON
BEXHILL
BRUXELLES
ČES. BRNO
NYIREGYHAZA
CLUJ
BACAU
PLYMOUTH
BARTLETT
BRIGHTON
BELGIUM
BUDEJOVICE
ORADEA
STALIN
Black Sea
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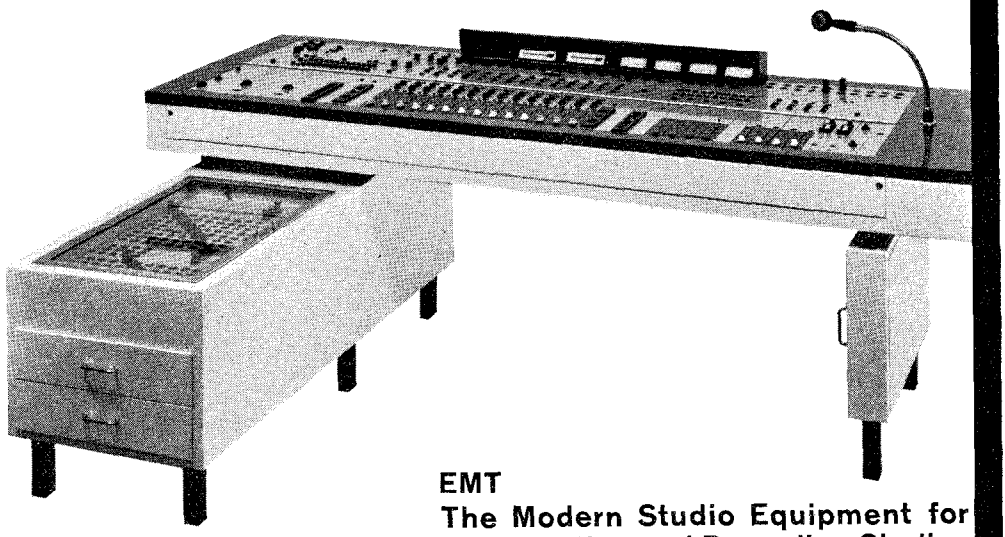

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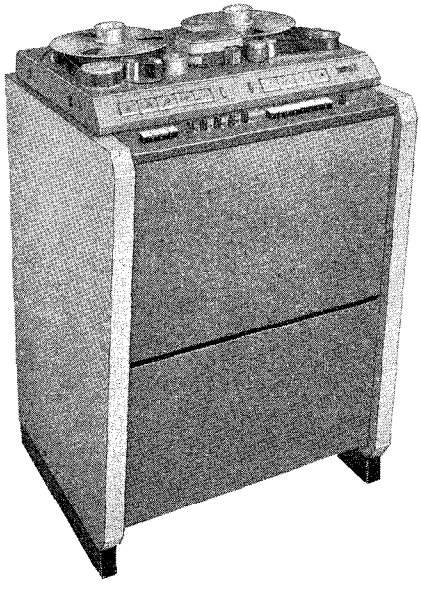

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ABBREVIATIONS:

Addr. = Address
AD = Advertising
Adm. = Administration
Adv. = Advertisement
Ag. = Acting
Amat. = Amateurs
A.M. = Amplitude modulation
Ann. = Announcement
Ant. = Antenna
Approx. = Approximately
Apr. = April
Apt. = Ap artado
Assoc. = Associate(ion)
Asst. = Assistant
Aug. = August
Av. = Avenue, Avenida
B.P. = Boite Postale
Br. = British
Broadc. = Broadcast(ing),
C = Central
Ca. = Calle
Cas. = Casilla
Ch. = Channel
Chmn. = Chairman
Ci. = Ciudad
Co. = Company
Comm. = Commercial
Contr. = Controller
Corp. = Corporation
C.P. = Caixa Postal
Cra = Carrera
c/s = Cycles per second
D = Daily
d. = Directional aerial
Dec. = December
Def. = Definition
Dem. = Democratic
Dept. = Department
Dep. = Deputy
Dir. = Director
Dir. Gen. = Director General
Div. = Division
DX = Long distance
E. = English
Ea. = East
E. by R = English by Radio
Ed. = Edificio
Educ. = Education, ducational
Emis. = Emissora
Equip. = Equipment
Eng = Engineer, Engineering
ERP = Effective radiated power
exc. = Except
Exec. = Executive
exp. = Experimental
Feb. = February
Fed. = Federal
F.I. = Financing
Fi. = Finnish
Fl. = Flemish
F.M. = Frequency modulation
F.PL. = Future plans
For. Rel = Foreign Relations
Fri = Friday
Freq. = Frequency
G. = German
Gen. Mgr = General Manager
G.M.T. = Greenwich Mean Time
Go. = Government
Gr. = Greek
h = Hour
H = Horizontal polarisation
Hqs. = Headquarters
I = Italian
incl. = including
Inf. = Information
Int. = International
Int. Sig. = Interval Signal
Isl. = Islands
Jan. = January
kc = Kilocycles
kW = Kilowatt
L.P. = Leading Personalities
L = Language
L.N. = Local News
L.L. = Language Lessons
L.T. = Local Time
Man. = Managing
ME = Middle East (Near East)
Mgr. = Manager
Miss. = Missionary
Mon = Monday
m.b. = Meter band
Mbg. = Mailbag
MW. = Medium Wave
N. = News
Nac. = Nacional
Nat. = National
Net. = Network
nd = non directional antenna
N.E. = Near East
No. = North
Nov. = November
OBV = Outside broadcast vehicles
occ. = Occasionally
Oct. = October
Org. = Organization
Pa. = Pacific
P. = Portuguese
Po. = Population
Pol. = Polarisation
P.R. = Peoples Republic
Pr. = Province
Prod. = Production
Pri. = Private
PrL = Principal Languages
Pres. = President
Prgr. = Programme
Pub. = Publication
R = Radio
Rcvrs. = Receivers
Re. = Report
Rec. = Records
Red. = Rediffusion
Rdif. = Radiodiffusion
Reg. = Regional
Rel. = Relay(ing), Relations
Rlg. = Religious
Rep. = Republic
Rf. = Rundfunk
Rp. = Return postage required
Rus. = Russian
Sat = Saturday
Sce. = Service
sched. = Schedule
Secr. = Secretary
Sen = Senior
Sep. = September
So. = South
Soc. = Sociedad(e)
So. We. = South West
Sp. = Spanish
SSR = Sovjet Socialist Rep.
St. = Station
Str. = Street
Su. = Summer
Sun = Sunday
Superv. = Supervisor
SW. = Shortwave
Te. = Telephone
Techn = Technical
Terr. = Territory
Thurs = Thursday
Tr. = Transmitter
Trop. = Tropical
Tues = Tuesday
T.V. = Television
Univ. = University
V = Vertical polarisation
V. = Verification
W = Weekdays
We. = West
Wed = Wednesday
Wi. = Winter
Wrp. = Weather report

Abbreviations of broadcasting organizations, countries and advertisers
ABC = Australian Broadc. Comm – AFN = American Forces Network AFRTS = Armed Forces Radio and Television Sce – AIR = All India Radio – BBC = British Broadc. Corp – BBCFES = BBC Far Eastern Station – BCC = Broadcasting Corpo. of China – BFN = British Forces Network – BR = Bayrischer Rundfunk – BRT = Radiodiffusion Television Belge – CBC = Canadian Broadc. Corp – COPE = Cadena de Ondas Populares Espanola – DW = Deutsche Welle – FBS = Forces Broadc. Service – FCC = Federal Communications Commission – FEBC = Far East Broadc. Company – ITA = Independent Television Authority – NDR = Norddeutscher Rundfunk – N.H.K. = Nippon Hoso Kyokai – NZBS = New Zealand Broadc. Sce. – OCORA = Offiec de Cooperation Radiophonique – RAE = Radiodifusion Argentina al Exterior – RAI = Radiotelevisione Italiana – RBI = R. Berlin International – REM = Red de Emisores del Movimiento – RFE = Radio Free Europe – RIAS = Rundfunk in Am. Sector – RNE = Radio Nacional de Espana – RRI = Radio Republik Indonesia – RTB = Radiodiffusion Television Belge – ORTF = Office de Radiodiffusion Television Francaise – SABC = So. African Broadc. Corp – SBC = Swiss Broadc. Co – SDR = Süddeutscher Rundfunk – SER = Sociedad Espanola de Rdif – SR = Saarländischer Rundfunk – SSS = Swiss Shortwave Service – SWF = Südwestfunk – VOA = Voice of America – WDR = Westdeutscher Rundfunk – WRUL = R. New York Worldwide – U = United Nations.

Af = Africa – Am = America – Au = Australia – As = Asia – Br. G. = British Guiana – Co = Congo – Czech = Czechoslovak Socialist Rep – Eu = Europe – F.E. = Far East – Fr = French, France – GB = Great Britain – G.D.R. = German Democratic Republic – Isl = Islands – N.Z. = New Zealand – Sp = Spain – UAR = United Arab. Republic – UK = United Kingdom of Gt. Britain – USA = United States of America – USSR = Union of the Soviet Socialist Republics.

Abbreviations of Advertisers: AKG = Akustische und Kino-Geräte G.m.b.H., Vienna – AWA = Amalgamated Wireless Australia Ltd. CFTH = Compagnie Française Thomson Houston, Paris – CFS = Compagnie Generale de Telegraphie Sans Fil, Paris – GE = General Electric – NEC = Nippon Electric Company, Tokyo – RCA = Radio Corporation of America – STC = Standard Telephone & Cables Ltd. TRT = Télécommunications Radioélectriques et Téléphoniques, Paris.

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With this up-to-date guide, you can have as much pleasure monitoring shortwave during the summer as you do the other seasons of the year. Many broadcasting stations revise their schedules for that period. The 1965 Summer Supplement – issued in June 1965 – will contain hundreds of changes in time schedules and programming and will bring your World Radio Television Handbook 65 right up to the minute including the summer schedules of the major broadcasting and shortwave stations. So there is no need to give up your hobby during that time. You can still monitor the many important stations around the world which are usually received with good volume at certain times of the day throughout the summer and autumn season.

There are approximately 80 pages of program details on thousands of stations and in addition you receive a complete up-to-date table of shortwave stations in the world. To make sure of getting your copy, we suggest that you send us your order as early as possible. Price: $ 1.80, £ 0/12/0, D. Kr. 12.25 per copy, plus postage $ 0.20, £ 0/1/6, D. Kr. 1.25 per copy.

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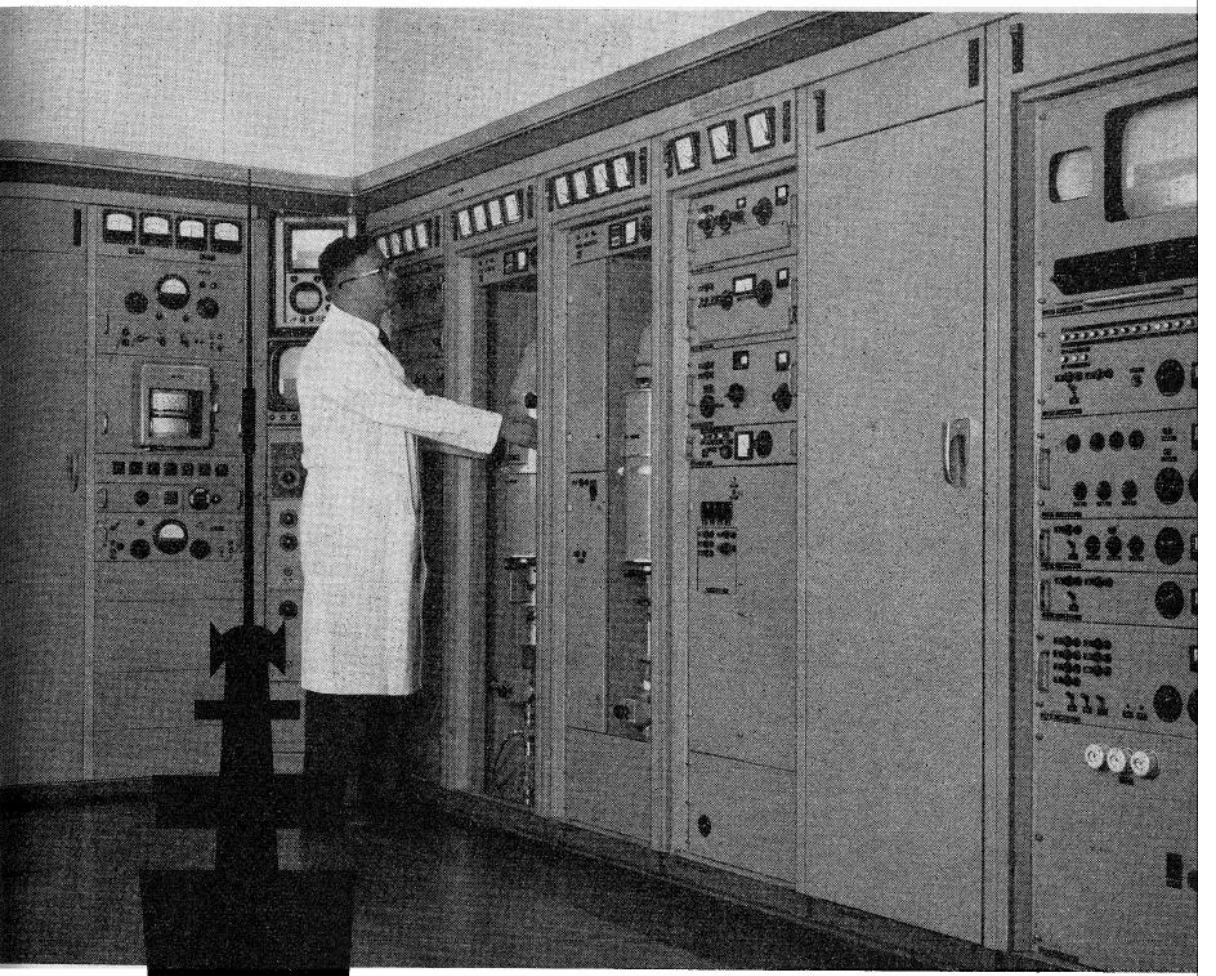

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NUMBERS OF LISTENERS

Country	Po.	R.Rcvrs.	TV Rcvrs.
Afghanistan	12.100.000	35.000	—
Albania	1.820.000	100.000	—
Algeria	12.000.000	1.000.000	67.000
Andorra	12.500	3.200	—
Angola	4.850.000	62.500	—
Argentina	21.926.900	5.800.000	1.600.000
Australia	11.023.000	2.270.809	1.794.116
Austria	7.100.000	2.120.703	500.000
Azores	350.000	30.000	—
Bahamas	140.000	35.000	—
Bahrain	168.493	35.000	—
Barbados	250.000	33.000	2.000
Basutoland	900.000	22.500	—
Bechuanaland	543.000	3.000	—
Belgium	9.300.000	2.934.779	1.206.322
Bermuda	55.000	22.000	11.600
Bolivia	3.300.000	500.000	—
Brazil	80.000.000	7.500.000	2.200.000
Brunei	86.350	7.600	—
Bulgaria	8.111.400	1.926.719	87.274
Burma	24.200.000	147.525	—
Burundi	2.300.000	100.000	—
Cambodia	6.000.000	300.000	1.100
Cameroon	4.500.000	110.000	—
Canada	19.000.000	10.000.000	4.800.000
Canary Islands	1.250.000	125.000	1.000
Cape Verde Isl.	201.549	3.003	—
C. African Rep.	1.250.000	25.000	—
Ceylon	10.000.000	420.000	—
Chad	3.000.000	18.500	—
Chile	8.515.023	1.300.000	40.500
Colombia	15.000.000	1.500.000	230.000
Comores Islands	180.000	3.600	—
Congo (Brazzaville)	1.000.000	80.000	1.500
Congo Rep.	14.000.000	200.000	—
Costa Rica	1.336.274	122.740	18.500
Cuba	7.000.000	1.275.000	550.000
Cyprus	590.000	110.000	8.000
Czechoslovakia	14.030.000	3.705.087	1.800.000
Dahomey	2.300.000	30.000	—
Denmark	4.600.000	822.335	975.712
Dominican Rep.	4.000.000	115.000	35.000
Ecuador	4.560.000	510.000	8.000
El Salvador	2.811.000	394.620	25.120
Ethiopia	20.100.000	325.000	—
Faroe Isl.	36.200	8.700	—
Fiji	441.000	30.000	—
Finland	4.546.616	1.446.690	571.467
France	46.242.514	9.783.382	5.133.577
Gabon	600.000	35.000	1.000
Germany, Fed. Rep.	57.670.000	17.329.635	9.443.209
Germany, Dem. Rep.	17.136.000	3.782.500	2.145.000
Ghana	7.000.000	500.000	500
Gibraltar	25.000	4.901	3.500
Gilbert & Ellice Isl.	50.000	800	—
Great Britain	53.301.000	18.936.600	14.616.200
Greece	8.410.000	800.000	200
Greenland	35.500	6.000	—
Guadeloupe	330.000	10.000	—
Guatemala	4.000.000	55.000	50.000
Guiana, Br.	620.000	85.000	—
Guiana, Fr.	42.000	2.000	—
Guinea, Rep.	4.010.000	50.000	—
Guinea, Port.	510.000	4.343	—
Guinea, Sp.	220.000	3.000	—
Haiti	4.235.000	60.000	5.000
Hawaii	694.000	141.000	119.000
Holland	12.044.000	3.097.307	1.574.395
Honduras, Br.	100.000	6.500	—
Honduras, Rep.	2.000.000	128.000	6.500
Hong Kong	3.642.500	144.922	24.000
Hungary	10.000.000	2.480.870	471.377
Iceland	186.912	50.563	—
India	440.000.000	3.736.688	1.000
Indonesia	96.000.000	600.000	26.011
Iran	22.523.039	1.600.000	100.000
Iraq	7.100.000	550.000	150.000
Ireland	2.815.000	705.000	264.000
Israel	2.443.600	414.000	—
Italy	52.125.000	9.915.233	4.993.318
Ivory Coats	3.600.000	50.000	1.500
Jamaica	1.706.318	242.500	13.000
Japan	94.000.000	19.534.309	16.112.798
Jordan	1.869.493	191.000	500
Kenya	8.900.000	300.000	10.000
Korea Rep.	27.763.000	1.379.934	32.790
Kuwait	325.000	175.000	42.500
Laos	4.000.000	50.000	—
Lebanon	2.000.000	275.000	120.000
Leeward Isl.	13.600	3.000	—
Liberia	2.000.000	125.000	2.000
Libya	1.500.000	45.000	—
Luxembourg	350.000	110.104	21.202
Macau	200.000	5.637	—
Malagasy Rep.	6.000.000	250.000	—
Malaya	8.500.000	1.000.000	20.000
Mali	4.500.000	45.000	—
Malta	330.000	27.760	27.140
Marianas Isl.	70.000	30.000	18.000
Martinique	315.000	17.500	—
Mauritania	800.000	15.000	—
Mauritius	700.000	80.000	500
Mexico	39.000.000	4.600.000	630.000
Monaco	20.500	6.250	13.000
Morocco	12.000.000	650.000	16.000
Mozambique	6.600.000	100.000	—
Nepal	9.500.000	30.000	—
Neth. Antilles	204.000	90.000	24.500
New Caledonia	80.000	12.000	—
New Zealand	2.590.787	660.000	250.000
Nicaragua	1.600.000	90.000	10.000
Niger	3.000.000	40.000	—
Nigeria	52.000.000	600.000	15.000
Norway	3.700.000	1.062.474	360.273
Pakistan	93.851.556	432.255	200
Panama	1.193.712	496.329	65.000
Paraguay	1.700.000	105.000	—
P.R. of China	650.000.000	8.000.000	100.000
Peru	10.364.620	2.000.000	160.000
Philippines	29.000.000	1.225.000	75.000
Poland	31.056.700	5.755.820	1.500.000
Portugal	8.410.800	1.074.956	136.455
Puerto Rico	2.529.0000	379.812	175.956
Reunion	380.000	40.000	—
Rumania	18.600.000	2.644.152	320.000
Ryukyu Isl.	900.000	200.000	81.000
Sabah (Malaysia)	454.421	26.500	—
Samoa	144.000	13.000	300
Sarawak (Malaysia)	799.246	43.750	—
Saudi Arabia	7.000.000	35.000	29.000
Senegal	3.100.000	200.000	—
Seychelles	46.000	1.200	—
Sierra Leone	2.250.000	80.000	500
Singapore (Malaysia)	1.800.000	88.011	45.869
Solomon Isl.	130.000	1.000	—
Somaliland, Fr.	80.000	3.500	—
Somali	2.200.000	30.000	—
So. Africa	16.500.000	6.500.000	—
So. Rhodesia	4.136.800	80.000	26.398
Spain	31.500.000	4.550.000	900.000
Sudan	12.150.000	225.000	—
Surinam	310.000	35.000	—
Sweden	7.627.000	2.944.480	1.892.000
Switzerland	5.700.000	1.608.593	454.586
Syria	5.000.000	260.000	40.000
Tahiti	80.000	20.000	—
Taiwan	12.000.000	1.025.000	25.000
Tanganyika	9.500.000	110.000	—
Thailand	30.000.000	1.610.000	180.000
Timor	517.079	1.286	—
Trinidad	894.000	163.500	17.500
Togo	1.600.000	20.000	—
Tunisia	4.100.000	306.000	—
Turk & Caicos Isl.	6.000	1.000	—
Turkey	29.000.000	1.700.000	1.500
Uganda	6.800.000	105.000	1.000
United Arab Rep. (Egypt)	30.000.000	3.000.000	300.000
United States (incl. Alaska)	190.248.000	63.053.000	50.951.000*
Upper Volta	4.500.000	50.000	500
Uruguay	2.870.000	900.000	175.000
USSR	220.000.000	61.500.000	10.000.000
Venezuela	8.255.456	1.651.000	740.000
Vietnam Rep.	14.000.000	150.000	—
Windward Isl.	335.000	17.500	—
Yugoslavia	19.800.000	2.400.941	299.212
Zambia	3.550.000	75.000	8.000
Zanzibar	300.000	4.500	—

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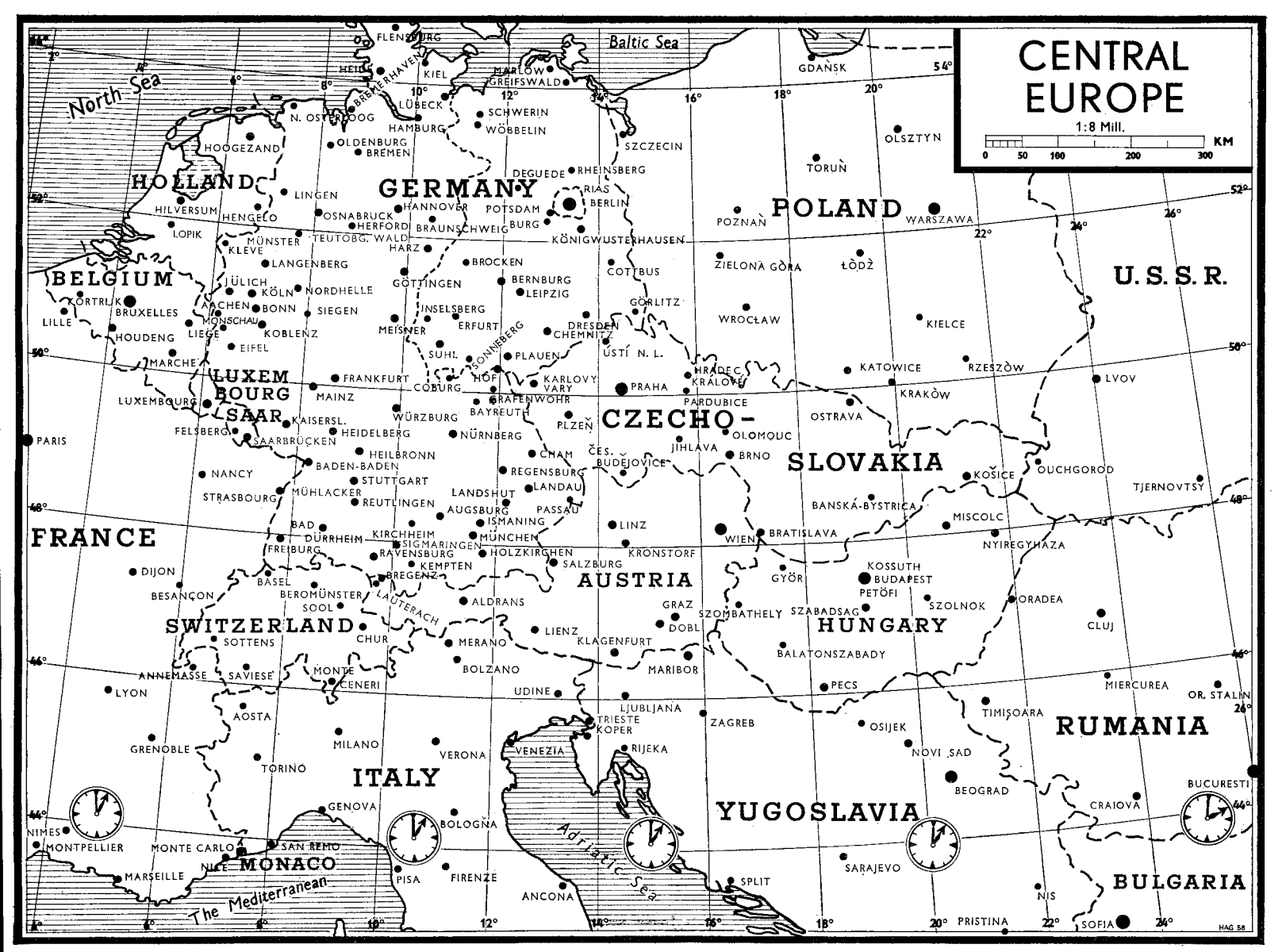
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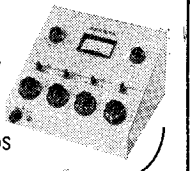

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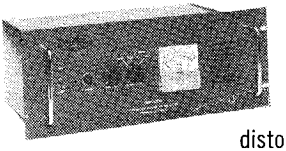

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AUSTRALIA: New Zealand DX Radio Association (Australia section) G.P.O. Box 379D, Hobart, Tasmania – New Zealand DX Radio Association (N.S.W. Branch), 50 Brush Rd. Eastwood, Sydney – We. Australian Branch of the N.Z. DX Radio Ass, 108 Lansdowne Rd., So. Perth. and New So. WalesBranch, 50 Kauri Str., Cakramatta, NSW. Publ: "Wavelenght".
BELGIUM: Europa DX-TV Club, 45 Schelpenstraat, Rekkem, West Vlaandern (Publ: "Europa DX-TV Club" in F, E, G, Dutch).
BENELUX: Benelux DX-Club, Oude Amersfoortseweg 153, Hilversum (Publ: "Benelux DX-Club" in Dutch and English).
BRAZIL: Clube Investigacão Ondas Receptores do Brazil C.P. 626, Campinas, C.P. Estado de Sao Paulo. (Publ: "Short Wave News").
CANADA: R. Canada Shortwave Club, c/o CBC, International Sce, P.O. Box 6000, Montreal – **Canadian Aero-Space Club,** 2740 Everts Ave., Windsor, Ontario. (Publ: "Wings & Space" in Engl.) – **Canadian DX-Club** 946 Lawrence Ave. East, Apartement 5, Don Mills, Ont. (Publ: "Cadex") – **Canadian International DX Radio Club,** 616 Stewart St., St. Charles, Manitoba. (Publ: "CIDX Messenger" in English).
DENMARK: The Danish Short Wave Club International, P.O. Box 6, Nørresundby. (Publ: "Shortwave News" in Engl. and "Kortbølge Nyt" in Da.) – **Danmarks DX Club,** c/o J. Kryger, Hundslev pr. Ketting, Als. (Publ: "DX-News" from DX-LC, Norway) – **The Cimbrer DX-Club,** Vestervang 3, Aars. (Publ: "The Cimbrer DX-News" in Engl./Danish) – **World Radio Club,** P.O. Box 824, Copenhagen Ø.
ECUADOR: HCJB-Club, La Voz de los Andes, Cas. 691, Quito.
FINLAND: Affiliated with *) Finlands Svenska DX-Förbund – **) The Federation of Finnish DX-Clubs – **) Suomen DX-Kuuntelijat r.y, P.O. Box 454, Helsinki. (Publ: "DX-Kuuntelija") – *) **Esbo DX-Klubb rf,** Morby, Esbo – **Federation of Finnish DX-Clubs,** Parksvängen 19c, Drumsö – **) ***Finlands* **DX-Club rf,** P.O. Box 214, Helsinki. (Publ: "Attention" in Engl. and Swedish) – **Finlands Svenska DX-Förbund,** Kungsgatan 11, Ekenäs. (Publ: "Frekvensnytt" in Swedish – distributed to members of all aff. clubs) – *) **Jakobstads DX-Club,** Kristineg. 9, Jakobstad – *) **Nykarleby Radio Club rf,** Nykarleby – **The Scandinavian DX-Club,** Tavastby. (Publ: "DX-Uutta") – *) **Västra Nylands DX-Klubb rf,** Kungsgt. 11, Ekenäs.
GERMANY: Calling DX-ers from Germany, Münchener Str. 40, Bremen (Publ: "Calling DX-ers from Germany" in Engl.) – **North German DX Club,** Hamburg-Volksdorf, Im Allhorn 6 – **Radio Japan Club.** Branches as follows, Publ: "RJC-Mitteilungen". Berlin: Berlin 51 Residenzstr. 15a – Hamburg: 200 Hamburg 19. Grädenerstr. 5 – Westphalen: 48 Bielefeld, Postfach 8501 – North West: 294 Wilhelmshaven 9, Dirschauerstr. 1 – Kl. Aachener Runde: 51 Aachen, Robenstr. 44 – Zentral-Kartei: 2201 Kl. Offenseth, ü., Elmshorn.
INDIA: DX-Philatelica, Dilip Kumar Banerjee, P.O. Box c/o Postmaster Khas Jinagora.
IRELAND: Trans National DX League of Ireland, c/o Patrick Ryan, 18 Church St, Letterkenny, Co. Donegal (Publ: "DX-Diary").
JAPAN: R. Japan Club, NHK, Tokyo – **Japanese Short Wave Club,** P.O. Box 29 Sendai. (Publ: "SWDX Guide") – **Radio Nederland Listener Club,** P.O. 24 Shiga-ken (Publ: "Un-Publication").
KOREA: Korean Short Wave Club, 40 Yon-sei Educational Broadcasting System, Yon-sei University, Seul – **Korea Shortwave Radio Club (KSC)** and **Radio Japan Club,** 424-I ku, 3 Ka, Tong-in-Dong, Taegu City (Publ: "KSC bulletin").
NEW ZEALAND: New Zealand DX Radio Association, 78 District Rd. Green Island, Dunedin (Publ: "Tune In" in Engl.) – **New Zealand Radio DX League,** P.O. Box 1356, Christchurch (Publ: "New Zealand DX-Times" in Engl.).
NIGERIA: Radio Nigeria Listeners Club, 45, Martins St., Lagos (Publ: "Radio Times").
NORWAY: DX-Listeners Club, P.O. Box 1284 V, Oslo. Publ: DX-News – **Nor-Tape International,** P.O. Box 3067 EL, Oslo 2 (Publ: "Nor-Tape News" (newspaper) a. "Nor-Tape Newstape" (tape)).
REP. OF SOUTH AFRICA: Natal Short Wave Club International, 219 North Ridge Rd, Durban – **So. Africa Radio Japan Club & Voice of America Listeners Club,** 8 Belgravia Rd, Gleemor, Cape (Publ: "Japan Journal" in English & "VOA-Monitor") – **World Wide DX-Club,** 95 Bathurst St, Grahamstown, Cape (Publ: "DX-Monitor").
SWEDEN: Affiliated with 1) DX-Alliansen, 2) DX-Ringen, 3) Norrlands DX-Förbund, 4) Sveriges DX-Förbund, 5) Sveriges Radioklubb, 6) Väst Sveriges DX-Förbund, 7) Västmanland-Dala DX-Union, 8) Sveriges DX-Riksklubb.
DX-Alliansen (a national union of Swedish clubs), Box 3108, Stockholm 3 (Publ: "Allians-Nytt" in Sw. and "Allians News" in Engl.) – 1) **Artic Radio Club,** Box 220, Björneborg (Publ: "MW-Eko") – 1) **Atlas DX-Club,** Box 34, Skene – 1) 4) **Bjuv Radioklubb,** Bjuv (Publ: "Eter-Aktuellt") – 1) 8) **Burträsk DX-Club,** Box 222, Burträsk (Publ: "Burträsk-Osten") – 1) **DX Cirkeln Stockholm,** Attundavägen 21B, Bromma – 4) **City DX-Klubb,** Box 29, Läckeby (Publ: "Eter-Aktuellt") – 1) 2) **DX-Club Oskarshamn,** Norra Strandvillan 9, Oskarshamn 2 (Publ: "Su Dox") – 1) **DX-Club Tellus,** Götgatan 16, Söderhamn (Publ: "The Voice of Tellus") – 1) 2) **DX-Club 57,** Box 46, Nässjö (Publ: "SuDox") – 1) 2) **DX-Club 63,** Box 144, Vimmerby (Publ: "SuDox") – 1) **DX-Klubben Electron,** Box 2066, Eskilstuna, (Publ: "Electronnytt") – 1) **DX-Klubben Vargen,** Box 84, Nås – 1) **DX Club Ålen,** Vänskapsvägen 53, Stockholm K – 1) 8) **Falkens DX-Club,** Box 5, Klintehamn (Publ: "Gute-DX-aren") – 1) **Fyris Radio Club,** Box 12042, Uppsala – 1) 7) **Fagersta DX-Klubb,** Mistelv. 8, Fagersta 2 (Publ: "Shortwaveradio") – 1) **Folkunga DX-Club,** Stora Torget 5, Linköping – 1) 6) **Gothenburg DX-Club International,** Box 31004, Göteborg 31 (Publ: "Gothenburg DX-Bulletin") – 1) 7) **Grängesberg DX-Klubb,** Olsjön Box 522, Saxdalen (Publ: "Shortwaveradio") – **Göteborg Fritidsbyrås DX-Sektion,** Box 5134, Göteborg 5 (Publ: "DX-Tips") – 1) **Halmstads Kortvågsklubb,** Fack 15, Halmstad – 4) **Husums DX-Club,** Box 199, Husum – 1) **IOGT-DX-Club,** Vasagatan 9, Stockholm C – 1) 2) ***Kopparbergs Radioklubb,*** Fack 59, Kopparberg – 8) **Malmö Kortvågsklubb,** Fack 7026, Malmö 7 (Publ: "Malmö DX-aren") – 1) **Mälardalens Radiosällskap,** Stenhällsv. 13. I, Stockholm K (Publ: "QRG-Bulletinen") – 1) **Nordic Radio Club,** Altunag. 9, Västerås (Publ: "Norac Bulletin") (medium wave only) – **Norrlands DX-Förbund,** Box 117, Umeå (Publ: "Substancial") – 1) **Oskar-Fredriksborgs DX-Klubb,** UB16, Oskar-Fredriksborg – **Radio Communications DX-Club,** Fack 59, Kopparberg (Publ: "From Point to Point" in Engl.) (Point to point DX only) – 1) **Radioklubben Universal,** Box 2053, Huddinge 2 – 4) **Sinus DX-Club,** Karlskronav. 23, Johanneshov (Publ: "Eter-Aktuellt") – 1) 5) **Skandinaviska Radioklubben,** Box 5083, Stockholm 5 – 1) 3) 8) **Skellefteå DX-Club,** Vitbergsv. 22, Skellefteå (Publ: "Substancial") – 1) 4) **Snapphanens DX-Klubb,** Gethornskroken 15B, Hässleholm (Publ: "Eter-Aktuellt") – 8) **Staffis DX-Club,** Staffanstorp – 1) **Stockholms DX-Club,** Carl Larssonsv. 50, Bromma – 1) 4) **Sundets DX-Club,** Pilåkersg. 27G, Landskrona (Publ: "Eter-Aktuellt") – 1) 4) **Svalans DX-Club,** Bankogårdsg. 47, Hälsingborg (Publ: "Eter-Aktuellt") – 1) **Sveriges Radioklubb,** Box 5083, Stockholm 5 (Publ: "DX-Radio") – 4) **Swedish Amateur Radiolisteners Club,** Box 701, Lund (Publ: "*Eter-Aktuellt*") – **Sveriges DX-Förbund,** Landskrona (Publ: "Eteraktuellt") – **Sveriges DX-Riksklubb,** Fack 4006, Lund 4 (Publ: "DX-aren") – 1) **Teknik för Allas Eterklubb,** Box 3137, Stockholm 3 (Publ: "Teknik för Alla") – 1) 2) **The DX-Companions,** Box 35, Hällestad (Publ: "SuDox") – 1) **The Goodwill DX-Club,** Box 4235, Malmö 4 (Publ: "Calling All DX-ers") – 1) 3) 8) **Umeå DX-Club,** Box 117, Umeå 1 (Publ: "Substancial") – 1) **Västra Aros Lyssnarklubb,** Box 165, Västerås 1 (Publ: "Kortvågen") – 1) **Västmanlands-Dala DX-Union,** Mistelv. 8, Fagersta 2 (Publ: "Shortwave Radio") – 1) **Väst Sveriges DX-Förbund,** Box 31004, Göteborg 31 (Publ: "GDX-aren") – 1) **Wermlands Radio Union,** Box 4071, Karlstad 4 (Publ: "WRU-Nytt") – 1) **Ystads DX-Förbund,** Box 23, Ystad (Publ: "The SWL-er") + 8 independent DX-Clubs.
SWITZERLAND: Schweizer DX-Club, Schürenstr. 3, Birmensdorf/ZH (Publ: "DX-Diary") – **Swiss BC-SWL-Club,** Rainallee 16, Riehen BS (Publ: "Swiss SW-News").

TAIWAN: Taichung Radio Japan Club, No. 21, Ho-Tso New Villa, Chi-Chiang St., Taichung.

UNITED KINGDOM: Alderman Newton's Boys' School DX-Club, 58 St. Leonard's Rd., Clarendon Park, Leicester, England – **Amateur Tape Reporters League A.T.R.L.,** 50 Goring Rd, North Dagenham, Essex, England (Publ: "ATRL Review") – **International Short Wave Club,** 100 Adams Garden Estate, London, S.E.16, England (Publ: "International Short Wave Radio") – **International Short Wave League,** 12 Gladwell Rd., London N. 8, England (Publ: "The Monitor") – **International Short Wave Radio and DX-Club of Scotland,** 12 Downie Terrace, Corstorphine, Edinburgh 12, Scotland (Publ: "DX-Diary") – **Medium Wave Circle,** 7 The Avenue, Clifton, York, England (Publ: "Medium Wave News") – **Trans National DX-League** (TNDXL), 76 Inverleith Place, Edinburgh 3, Scotland (Publ: "DX-Diary") – **Strathkelvin Shortwave Club** (TNDXL) 11 Moss Rd, Waterside, Kirkintilloch, Scotland (Publ: "DX-Diary") – **Trans National Tape-League (TNDXL),** 1 Russel Place, Trinity, Edinburgh 5, Scotland (Publ: "DX-Diary").

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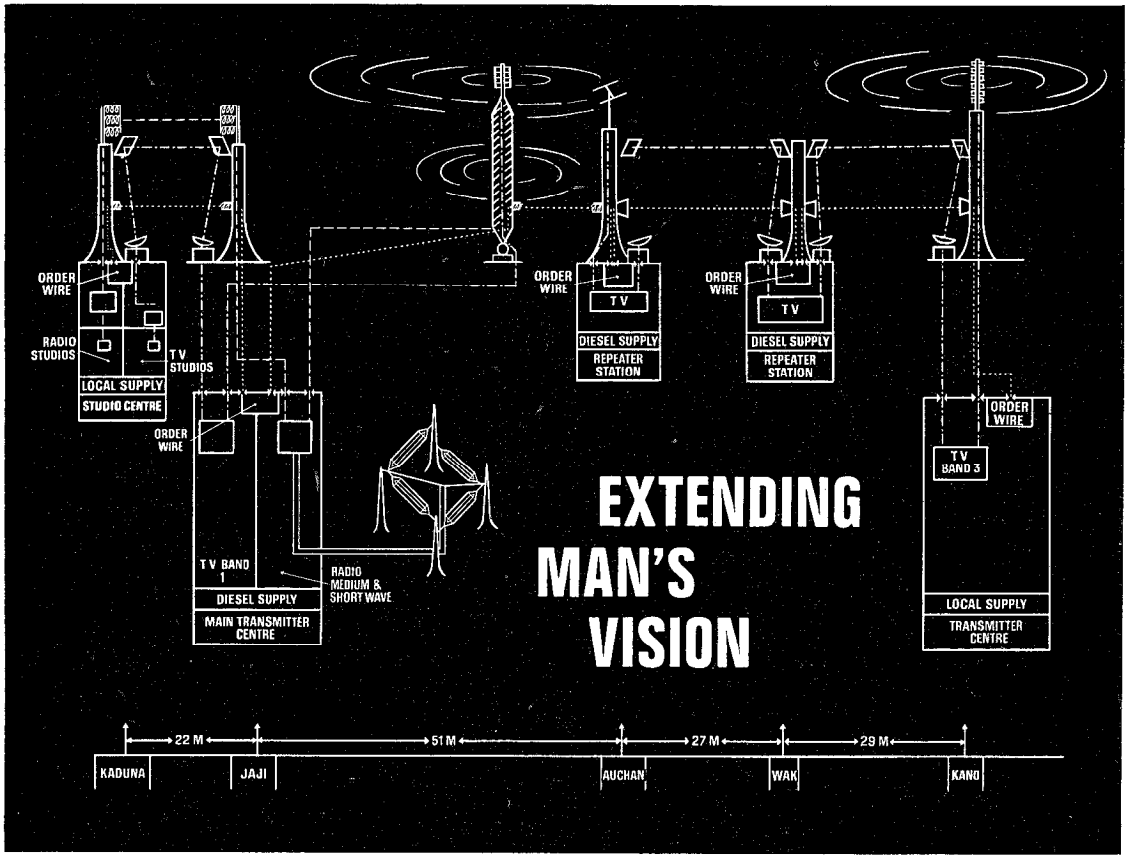
WEST INDIES: West Indies DXers Ass, 21 Richmond St, Port of Spain, Trinidad & Tobago (Publ: "Association-Bulletin"), Box 189, Castries, St. Lucia).



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SHORT WAVE CLUBS

RADIO-CANADA SHORTWAVE CLUB is on the air weekly to Europe, Africa, the Caribbean, the Americas, Australia, New Zealand and the islands of the Pacific at the times given below. The program runs for approximately 10 minutes and can be heard in the English, French and German language periods of the CBC International Service.

ENGLISH, Saturdays to Europe (1) at 12.20 on 16, 19 and 25 metres. To Africa at 18.52 on 16, 19 and 25 metres. To Europe (2) at 21.35 on 19, 25 and 31 metres. To the Caribbean and the Americas at 23.20 on 19, 25, 31 and 49 metres. Sundays to Australasia: First broadcast at 07.25; Second broadcast at 08.10 on 31 and 49 metres. All English-language programs of Club follow program FOCUS. — **FRENCH,** "Allo DX", Saturdays to Africa at 19.50 on 16, 19 and 25 metres. Saturdays to Europe at 20.35 on 19, 25 and 31 metres. — **GERMAN,** "Radio Kanada Kurzwellenklub", Sundays at 18.00 on 16, 19 and 25 metres. Also at 18.45 on Medium wave, VHF and in the 31 and 49 metres.

INTERNATIONAL SHORT WAVE LEAGUE. Join the ISWL and enjoy the following free services: QSL Bureau, Translations (40 languages), Station Identification (broadcast and utility stations), DX Certificates, Contests, Correspondance Bureau, etc. Monthly magazine, MONITOR, contains short-wave station news from official sources and 1,800 ISWL members in 80 countries; also contains sections for amateur SWLs, transmitting amateurs, VHF listeners, QSL card collectors, etc; general articles about short-wave stations, reporting and identifying stations in many languages, members experiences, etc., etc. Annual membership fee £ 1/1/0, US $ 3.00. Write now for free explanatory booklet to: **Dept. WRH, ISWL, 12 Gladwell Road, London N.8, England.**

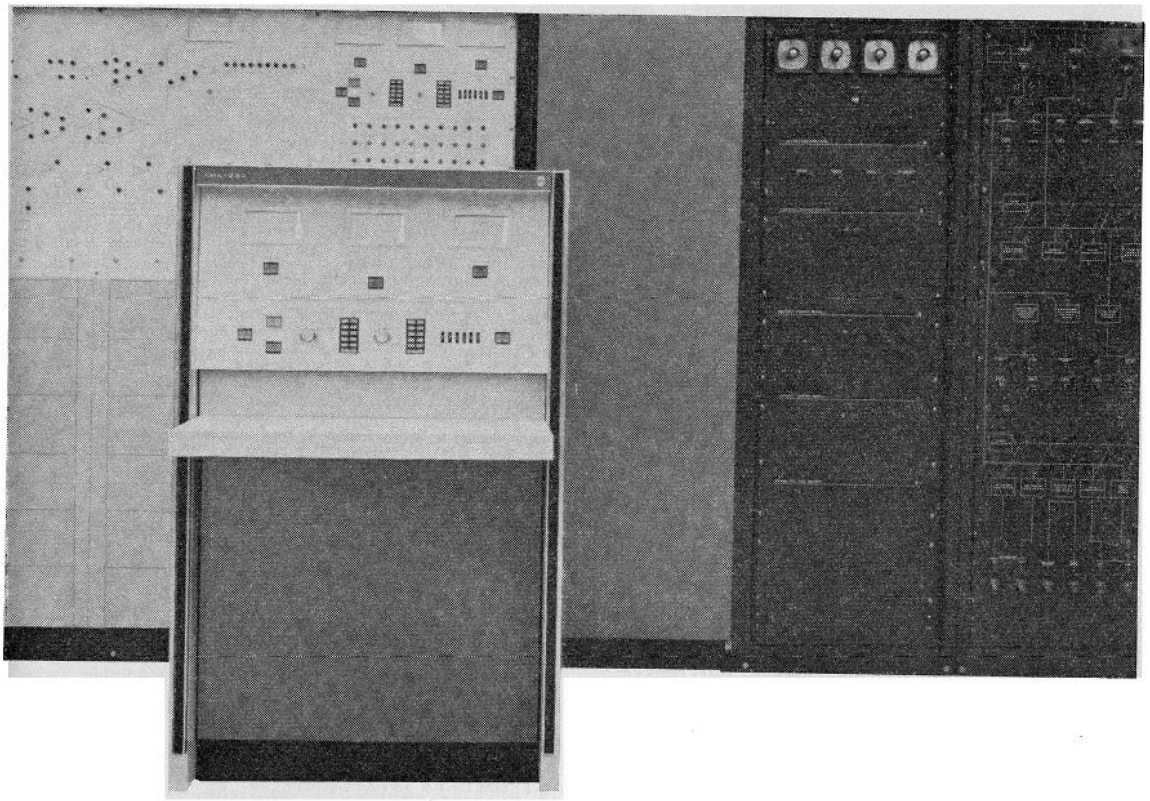
SVERIGES DX-RIKSKLUBB, Fack 4006, Lund 4.
Vil Du veta ALLT om DX-ing? Sveriges DX-Riksklubb är en ny klubb, bildad av flera av Sveriges största DX-klubbar för att få en tidning och service som passar alla DX-are. Varje månad publiceras »DX-aren«, tryckt i offset, med 48 eller fler sidor. Där finner Du specialartiklar om bl. a. Nybörjarfrågor, Latin-America, Asien, *Afrika, Europa, Mellanvåg, Teknik, Tips av högsta kvalitet*, QSL, Specialpresentationer och Aktuella småanotiser. Sveriges absoluta toppkrafter och specialister finner Du som redaktörer. Medlemsservicen (rapportformulär, rapportkort, tonband etc) är liksom tidningen unik och i särklass. Pren. avgift: 15:- eller 10:- för skolungdom under 16 år. Skriv för provex. och vidare upplysningar!
If you want a DX magazine with the best qualities write for free sample copy to Sveriges DX-Riksklubb, Fack 4006, Lund 4, Sweden.

SVERIGES DX-FÖRBUND (the DX-Union of Sweden) is an organisation of clubs, publishing a monthly, printed bulletin "ETER-AKTUELLT" with latest DX-news. Annual membership fee: US $ 2:25, £ 0/16/0, Sw. Crs. 12:00 20 IRC. Air mail: add $ 1:00. Sample free. Write to: *Eter-Aktuellt*, Landskrona, Sweden.

NEWARK NEWS RADIO CLUB

★ With a record of 37 consecutive years of service, NNRC is truly "The Pioneer of Radio and DX Clubs".
★ Monthly Bulletin has sections devoted to Standard Broadcast, Shortwave Broadcast, Amateur, Commercial, FM & TV bands, as well as to Card Swapping, NNRC's semi-annual Amateur Band Competitions & Statistics. Well over 600 pages a year to keep you up-to-date!
★ Certificates of Merit are available, to members who qualify, for verifying stations on all bands.
★ To get the most out of your hobby, you should join a DX club. Go first class; make your club the NNRC.
★ Annual dues, $ 5.00 U.S.; sample Bulletin, 25 c.

Newark News Radio Club, 215 Market Street, Newark 1, New Jersey, U.S.A.



Make an Extra Hour or More of "Air-Time" Per Day*

*Four daily frequency changes with the average HF broadcast transmitter can lose up to one hour of "on-air" time. With the Collins' 821-A automatically tuned 250 kw transmitter, this time can be saved to provide the equivalent amount of program transmission.

The Collins 821-A 250 kw, HF broadcast transmitter offers features never before available.

20-SECOND AUTOMATIC TUNING — Change frequencies automatically in the 3.95 to 26.5 Mc/s range in a maximum of 20 seconds — less for smaller frequency changes. Make preset frequency changes during normal station breaks.

CONTACT ELIMINATION — Sliding, rolling and switching contacts in the Power Amplifier r-f circuits *are eliminated* for greater reliability and decreased maintenance.

REMOTE OPERATION — A control console permits operation of the transmitter from a remote location.

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These are just a few of the features in Collins' new 821-A 250 kw, HF transmitter. There are many more. For complete information, call or write today.

COLLINS RADIO COMPANY

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COLLINS

RADIO

EUROPE

ALBANIA (People's Rep. of)

L.T: GMT+1 h – Pr.L: Albanian.

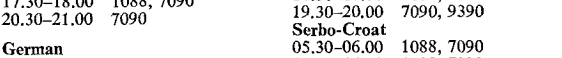
RADIODIFFUSION ET TELEVISION ALBANAISE (Go.)
ADDR: Rue Ismail Quemal, Tirana. Cable: Albradio. Te: 4307 – L.P: Dir: Th. Nano. Head, Foreign Rel. Dept: D. Nini.

HOME SERVICE
Tirana 1088kc 275.7m 50kW – Tirana 1358kc 221.0m 1kW
D.PRGR: on 1088, 1358kc: W 04.30–07.00, 11.00–22.00(Sat 23.00), Sun 05.00–22.00. N: 05.30, 06.30, 11.30, 13.00, 14.00, 17.00, 18.00, 19.00, 21,00 – Wrp: 20.15.

FOREIGN SERVICE
1088kc 275.7m – 7090kc 42.30m 50kW – 7850kc 38.22m – 9390kc 31.96m – 9715kc 30.88m 20kW.
D.Prgr's: 03.30–06.30, 16.00–20.30 on 1088/7092kc, 20.30–22.30 on 1088/7092/9715kc.

Arabic	kc	Greek	kc
04.00–04.30	1088, 7090	04.30–05.00	1088, 7090
19.00–19.30	1088, 7850	18.30–19.00	7090, 9390
21.00–21.30	1088, 7090, 9390	19.30–20.00	1088
Bulgarian		**Hungarian**	
05.00–05.30	1088, 7090	18.00–18.30	7090
17.00–17.30	1088, 7090	20.00–20.30	1088
19.00–19.30	7090, 9390	**Italian**	
English		06.00–06.30	1088, 7090
20.00–20.30	7090, 9390	18.00–18.30	1088
21.30–22.00	7090	22.00–22.30	1088, 7090, 9390
French		**Russian**	
17.30–18.00	1088, 7090	03.30–04.00	1088, 7090
20.30–21.00	7090	16.30–17.00	1088, 7090
German		19.30–20.00	7090, 9390
20.30–21.00	1088, 9390	**Serbo-Croat**	
21.30–22.00	1088, 9390	05.30–06.00	1088, 7090
		16.00–16.30	1088, 7090
		18.30–19.00	1088, 7090

ANN: Albanian: "Ju flet Tirana". Arabic: "Huna Tirana". Bulgarian: "Goveri Tirana". E: "This is Tirana calling". F: "Ici Tirana". G: "Hier spricht Tirana". Greek: "Milun Ta Tirana". I: "Parla Tirana". Russian: "Govorit Tirana". Serbo-Croat: "Govori Tirana" – INT-SIG: 9 notes played on clarinet – V. by letter.



RADIO KUKËSI (Go.) – ADDR: Drejtoria e Radio Kukesit, Kukes. L.P: Dir: X. Dobrosha – HOME SCE: Kukës 6660kc 45.04m (varies up to 150kc in freq.) 0.2kW – D.Prgr: 13.00–14.30, 15.00–19.30 – ANN: "Ju flet Kukësi" – V. by letter. Re. in French.

RADIO SHKODRA (Go.) – ADDR: Drejtoria e R. Shkodrës' Shkodër – L.P: Dir: A. Geno – STATION: Shkodër 8215kc 36.52m 0.2kW – HOME SCE: D 13.30–14.30, 16.30–20.00 – ANN: "Ju flet Shkodra" or "R. Shkodra" – V. by letter. Re. in German.

RADIO KORÇA – ADDR: Drejtoria e R. Korçes, Korçe – L.P: Dir: J. Mulo – STATION: 1349kc 222m 0.2kW – HOME SCE: 12.30–14.15, 16.30–20.00 – ANN: "Ju flet Korça".

RADIO GJIROKASTRA – ADDR: Drejtoria e R. Gjirokastres, Gjirokaster – L.P: Dir: N. Kokona – STATION: 1430kc 210m 0.2kW – HOME SCE: 13.00–14.30, 16.00–20.30 – ANN: "Ju flet R. Gjirokastra".

ANDORRA

L.T: GMT+1 h – Pr.L: French, Spanish, Catalan, English, German.

RADIO ANDORRA – Priv, Comm.)
ADDR: Direction: Obispo Catala 42, Barcelona 17, Spain – Cable: Rapro, Barcelona. Te: 23971 II – STATION: Roc des Anelletes, Andorre la Vieille, Principauté d'Andorre. Cable: Randorra. Te: 100. L.P: Dir. Gen: M. Degoy. Dir. Tec: J. L. Marquet. Dir. Prgr: G. Marquet. French Dept: J. Bonis. Spanish Dept: M. Pibernat. Catalan Dept: R. Calderon. Pub. Dept: M. Rodriguez. Listeners Sce: C. Ruiz. Gen. Mgr: J. J. Debezy. Superv: M. Brard. Dir. Prod: C. Mailhos. Educ: M. Michel. Dir. Pub: C. Codina.

STATIONS (System: Brown Boveri):
998kc 300.6m 400kW – 5995kc 50.04m 25kW.
HOME SCE: 05.00–24.00 on 998kc.
French: 05.00–13.00, 15.00–21.00 – Spanish, Catalan: 13.00–15.00 – Spanish: 21.00–24.00.
Music & N: W 11.00 – Boite Postale No. 1 (Dedicated Records): Sun 07.30, 20.00 – Jazz: D 06.00.
ANN: F: "Ici R. Andorre". Sp: "Aqui R. Andorra, emisora del Principado de Andorra, Roc de las Anelletas, Andorra la Vieja, Principado de Andorra".
INTERNATIONAL SCE:
L.P: Dir. Gen: M. Degoy. Dir. Tech: P. Cousse. Dir. Prgr: A. Rossel. English Dept: W. Danjon. German Dept: M. Zimmerman. Italian Dept: A. Dolade. Swedish Dept: G. Anderson. Pub. Dept: C. Valencia. Listeners Sce: J. Tellez. Superv: A. Piffaré. Dir. Prgr: J. M. Mas.
D.PRGR: 21.00–24.00 on 5995kc in English, German, Italian, Swedish.
ANN: F: "Ici R. Andorre International". E: "This is R. Andorra International". Sp: "Aqui R. Andorra Internacional, Emisora del Principado de Andorra. G: "Hier ist R. Andorra" – INT-SIG: Gong low. Open and close down "Hymne national Andorran" and "Marche des Conseillers Andorrans" – V. by QSL-card or letter. Rp. Records accepted – PUB: Prgr.schedule (weekly) illustrated sheet "Aqui Andorra" (monthly).

Wilhelm Franz K.G, Germany: EMT studio equip.

RADIO DES VALLEES-ANDORRE I (Comm.)
ADDR: P.O. Box 7, Andorra-la-Vielle. Cable: Radioval. Te: 7.
L.P: Pres. & Adm: H. Dolbois. Dir. Tec: R. Yves, P. Reymond.
STATIONS: 818kc 366.8m 300kW – 6305kc 47.58m 1kW.
FM: 98.9Mc 0.05kW.
HOME SCE: French: 05.45–13.00, 15.00–21.00, 21.05–23.30 – Spanish/French: 13.15–15.00 – Catalan: 13.00–13.15, 21.00–21.05.
ANN: F: "R. des Vallees – Andorre I". Catalan: "R. de les Valls – Andorra I". Sp: "R. de los Valles – Andorra I" – INT-SIG: Xylophone – V. by QSL-card and letter. Rp – PUB: Prgr.schedule (weekly), journal (every 2 months).

Telefunken A.G, Germany, studio equip. (recorders).

AUSTRIA

L.T: GMT+1 h – Pr.L: German.

ÖSTERREICHISCHER RUNDFUNK (Gesellschaft m.b.H.)
FI: By license payments and adv – AD: Prgr. I: 70 min. per day; Prgr. II: 15 min. per day; Prgr. III: 8 h 53 min. per day.
ADDR: Österreichischer Rundfunk, Wien IV, Argentinierstr. 30a. Cable: Rundfunk Wien. Te: 656661 – L.P: Dir. Gen, Adm: J. Scheidl. Vice Dir. Gen, Dir. Tec: Dipl. Ing. W. Füchsl. Dir. Prgr: Prof. Dr. A. Übelhör. Dir.-TV: G. Freund.
STUDIOS: R. Graz, Zusertalgasse 14a, Graz III. Cable: Radio Graz. P. Goritschnig – R. Klagenfurt: Sponheimerstr. 13, Klagenfurt. Cable: Radio Klagenfurt. P. Goritschnig – R. Linz: Obere Donaulände 1, Linz. Cable: Radio Linz. A. Schwetz – R. Salzburg: Franziskanergasse 5, Salzburg. Cable: Radio Salzburg. Dr. P. Becker – R. Tirol: Landhaus Neubau, Innsbruck. Cable: Radio Tirol. Dr. J. Scheidle – R. Vorarlberg: Neues Rathaus, Dornbirn. Cable: Radio Voralberg. Dr. W. Tölzer – R. Wien: Argentinierstr. 30a, Wien IV. Cable: Radio Wien. Dr. E. Glaser, H. Hasslinger.

HOME SERVICE
FIRST PRGR: W 04.30–21.05, Sun 05.00–21.15.

Medium W:	kc	m	kW		kc	m	kW
Aldrans I	629	476.9	25	Salzburg I	773	388	1
Lauterach I	629	476.9	25	Linz	890	337.1	15
Lienz I	629	476.9	1	Graz	1394	215.2	25
Klagenfurt I	728	412.1	25	Wien I	1475	203.4	150

Low Power M.W. (0.05kW, exc. where indicated):
566kc: Bad Ischl, Feistritz (0.1), Greifenburg, Maria Pfarr, Mühlbach, Radstadt, Neukirchen – 647kc: Aigen, Bischofshofen, Bleiburg, Gloggnitz, Neumarkt, Matrei, Ried, Radenthein – 773kc: Bad St. Leonhard, Hergamor, Lend, Mariazell, Oberdrauburg, St. Michael/Lungau, Leoben (0.1) – 1052kc: Krems, Neunkirchen – 1124kc: Bruck/Mur (0.1), Eisenerz, Hofgastein, Imst, Judenburg (0.1), Kufstein* (0.015), Mayrhofen, Tamsweg, Gmünd*, Kötschach (0.1), Mürzzuschlag (0.1), Villach (0.1), Obervellach, Rottenmann – 1313kc: Kindberg, Ehrwald, Friesach, Haslach, Knittelfeld (0.1), Liezen, Völkermarkt, Wolfsberg, Murau, Ötz, Trieben, Eisenkappel (1), Oberwölz, Neuberg – 1394kc: Admont, Bludenz, Spittal/Drau (0.2), Zell/See (0.2) – 1457kc: Amstetten, Schruns, Wr. Neustadt – 1484kc: St. Pölten (0.2) – 1493kc: Kitzbühel, Landeck, Mittersill, Reutte, Saalfelden, Schwarzach, Windischgarsten, Wörgl – 1546kc: Abtenau, Bad Aussee, Scheifling (0.1), Silian – 1594kc: Braunau, Feldkirchen, Zwettl – *=Operated by postal adm.

RADIO ANDORRA

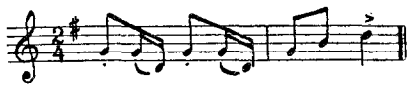
300,60 m 400.000 W

Roc des Anelletes · Andorra-la-Vieille
Principauté d'Andorre

Tel. 100-300 · Cable: "Randorra"

FM:	ch	Mc	kW		ch	Mc	kW
Jauerling I	15	91.4	50	H. Kaibling I	24	92.0	4
Hahnbaum I	16	91.8	0.1	Gaisberg I	26	94.8	50
Patscherkofel I	18	92.5	50	Lichtenberg I	27	95.2	50
Stubnerkogel I	17	92.1	0.1	Schöckl I	28	95.4	50
Schmittenhöhe I	18	92.4	0.01	Kahlenberg I	36	97.9	50
Pyramidenkogel I	36	97.8	10	Kaunertal	36	97.9	0.04
Pfänder I	21	93.3	50	Sonnwendst. I	29	95.8	2.5
Dobratsch I	11	90.4	0.15	Mugl I	39	98.7	20

N: W: 04.45, 05.45, 06.45, 11.30, 16.00, 19.00, 21.00. Sun: 05.45, 07.00, 08.00, 11.30, 16.00, 19.00, 21.00 – **"Blick in die Welt":** D 21.10.
Slovenian (Klagenfurt only): Sun 06.30–07.00, Mon–Fri 13.15–13.55 (Mon also 17.00–17.15), Sat 08.00–09.00, 17.25–17.45 (fortnightly).
ANN: "Hier ist der Österreichische Rundfunk, Erstes Programm, von Radio... (name of studio) hören Sie..." – **INT-SIG:** Extract from ballet-music from "Rosamunde" by Franz Schubert.



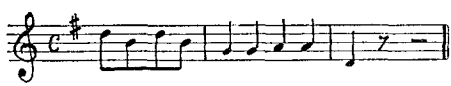
SECOND PRGR: W 04.30–23.05. Sun 05.00–23.05.

Medium Waves:	kc	m	kW		kc	m	kW
Aldrans II	520	576.9	10	Dobl	1025	292.7	100
Lienz II	520	576.9	10	Kronstorf	1025	292.7	100
Klagenfurt II	584	513.7	25	Lauterach II	1025	292.7	10
Salzburg II	584	513.7	10	Mariapfarr II	1025	292.7	5
Wien II	584	513.7	150				

Low Power M.W. (0.05kW): **520kc:** Bludenz 2, Murau 2 – **584kc:** Mayrhofen 2 – **962kc:** Ehrwald, Neukirchen 2, Neumarkt 2 – **1025kc:** Hergamor 2, Ötz 1, Kitzbühel 2 – **1142kc:** Bad Aussee 2, Landeck 2, Reutte 2, Saalfelden 2, Abtenau, Scheifling 2.

FM:	ch	Mc	kW		ch	Mc	kW
Mugl II	2	87.6	20	Stubnerkogel II	31	96.3	0.1
Schöckl II	7	89.2	1.2	Patscherkofel II	31	96.4	15
Pfänder II	9	89.7	2	Jauerling II	33	97.0	50
Gaisberg II	13	90.8	50	Hahnbaum II	34	97.2	0.1
Kahlenberg II	16	91.9	15	Lichtenberg II	35	97.5	100
H. Kaibling II	31	96.3	4	Dobratsch	23	93.8	0.15

N, Wrp: W 05.00, 06.00, 07.00, 12.00, 16.00, 18.00, 21.00, 22.00, 23.00. Sun 05.00, 06.00, 07.00, 09.00, 12.00, 16.00, 18.00, 21.00, 23.00.
"Eine Woche Weltgeschehen": Sun 18.10 – **Quiz Prgr:** Sat 19.00 – **L.L:** *English:* Fri 20.40–20.55. *Esperanto:* Tues 16.50.
ANN: "Hier ist der Österreichische Rundfunk, Zweites Programm, von Radio... (name of studio) hören Sie..." – **INT-SIG:** Extract from Opera "Die Zauberflöte" by W. A. Mozart.



THIRD PRGR: 16.10–23.00 (test). Other times relay 2nd prgr.

FM:	ch	Mc	kW		ch	Mc	kW
Hahnbaum III	4	88.2	0.1	Schöckl III	14	91.2	50
Sonnwendstein II*	4	88.2	2.5	Pyramidenk. III	19	92.8	10
Patscherkofel II	5	88.5	50	Pfänder III	37	98.2	50
Stubnerkogel III	5	88.5	0.1	Gaisberg III	40	99.0	50
H. Kaibling III	5	94.3	4	Jauerling III	40	98.4	50
Schmittenhöhe II	6	88.8	0.01	Lichtenberg III	41	88.8	100
Mugl III	9	89.7	20	Kahlenberg III*	43	99.9	50
*=testprgr. 14.00–16.00.				Dobratsch III	47	101.2	0.15

PUB: "Radio Österreich", weekly prgr.sched. Four times a year: "Aus dem Programm" – free on request.

SHORTWAVES: Stations 1/50kW. Call: OEI---. Test Prgr's.

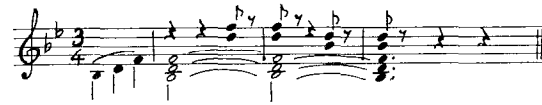
kc	m	kc	m	kc	m	kc	m
6000	50.00	9770	30.71	15240	19.69	17875	16.79
6155	48.74	11785	25.46	15410	19.47	17880	16.78
7245	41.41	11840	25.43	17805	16.85	17885	16.78
9525	31.50	15155	19.80	17855	16.80		

To Europe	kc	To India/Indonesia	To South Africa	kc
04.30–24.00	6000	05.00–07.00** 17805	07.00–09.00**	17855
05.00–22.00	6155	13.00–15.00** 15155	15.00–17.00**	17880
06.00–19.00	7245		17.00–19.00**	15240
09.00–17.00	9770	To Australia/	To No. America	
13.00–17.00	11785	N. Zealand	22.00–23.00*	6155
To Near East		09.00–11.00** 17875	23.00–04.30	6155
06.00–09.00	15410		To So. America	
11.00–13.00	17885	To Japan	22.00–24.00	11785
17.00–19.00*	11840	11.00–13.00** 11785	00.00–05.00	9525

* Sat/Sun/Mon only. – ** Mon/Wed/Fri only.

"The Week in Austria" (in German, English, French): Thurs 17.00 – **For Austrians abroad** (in German): Sat 09.30, Sun 17.00 – **Press Review** (in German): Tues 09.00 – **Folk Music and Viennese Music:** Tues 15.00.

ANN: "Hier ist der Kurzwellendienst des Österreichischen Rundfunks" – **INT-SIG:** "An der schönen blauen Donau" Waltz by Joh. Strauss.



AKG, Austria, delivered studio equip. (recorders, microphones) to Vienna, Salzburg.
Kathrein Antennen, Germany, delivered FM-antennas.
Telefunken AG, Germany, delivered 3×10kW FM tr's.
Brown Boveri, Switzerland, delivered mw-tr's: Bisamberg 2×240kW, Klagenfurt 2×25kW, Graz 25kW, Innsbruck 25kW, Dornbirn 25kW, Vienna 25kW, Salzburg 1kW.
Wilhelm Franz KG, Germany, delivered EMT studio equipments.

AZORES (Portuguese)

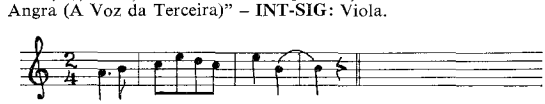
L.T: GMT – 2 h (Su: – 1 h) – **Pr.L:** Portuguese.

EMISSOR REGIONAL DOS ACORES (Go.)

ADDR: Av. Gasper Fructuoso, Ponta Delgada, S. Miguel. **Te:** 22624.
STATION: CSA97 4865kc 61.66m 1kW.
HOME SCE: 14.00–15.00, 20.00–24.00 – **N:** *14.30, 22.30.*
ANN: "Aqui Portugal, Ponta Delgada, Emissor Reg. dos Açores da Emissora Nacional" – **INT-SIG:** Chimes – **V.** by letter or QSL-card.

R. CLUB DE ANGRA (Comm.)

FI: By adv – **ADDR:** Rua Conselheiro Anastacio de Bettencourt, Angra do Heroismo. Ilha Terceira. **Te:** 219.
STATION: CSB80 1394kc 215.2m 1kW.
HOME SCE: W 09.00–12.00, 14.00–16.00, 20.00–01.00, Sat 09.00–12.00, 14.00–01.00, Sun 09.00–01.00 – **N:** 10.45(W), 13.00(Sun), 15.00(W), 21.00, 23.45 – **ANN:** "Aqui estação CSB80 de R. Club de Angra (A Voz da Terceira)" – **INT-SIG:** Viola.



V. by letter. Records accepted – **F.PL:** Increase power, SW – FM.

EMISSORA DO CLUBE ASAS DO ATLANTICO (Comm.)

FI: By adv – **ADDR:** Aeroporto de Santa Maria. **Te:** 285.
HOME SCE: CSB81 1570kc 191m 1kW: W 12.00–16.00, 19.00–02.00, Sun 11.00–02.00. **N:** 13.00, 21.00, 22.00 – **Wrp:** 14.00, 16.00, 19.00, 02.00.
ANN: "Aqui Santa Maria, fala a estação emissora do Clube Asas do Atlantico" – **INT-SIG:** Opens with music played on a Portuguese string instrument (viola) and guitar – **V.** by postcard.

ARMED FORCES RADIO & TV SCE see USA.

BELGIUM

L.T: GMT + 1 h – **Pr.L:** French, Flemish, German.

RADIODIFFUSION-TELEVISION BELGE (R.T.B.) – BELGISCHE RADIO EN TELEVISIE

(Belgian Broadcasting and Television) (Go.)
FI: by state grant-in aids – **ADDR:** Place Eugène Flagey 18, Bruxelles 5. **Cable:** INR Bruxelles, **Te:** 48.81.00.
L.P: Emissions françaises: Dir. Gen: R. Wangermée. Prgr. Dir: M. Hankard. Prgr. Dir. (TV): L. P. Kammans – **Nederlandse uitzendingen:** Dir. Gen: P. Vandenbussche. Prgr. Dir: C. Mertens. Prgr. Dir. (TV): B. Jansens – **Services Communs. Gemeenschappelijke diensten (common sce's):** Tec. Dir. Gen: F. Mortiaux. Chief Eng's: G. Gourski and M. De a Fonteyne. Adm. & Finance Dir. Gen: F. Hoosemans – **International Sce.s:** Exec. Dir: F. Zoete. **German Prgr:** Head: Mrs. I. Janetzky – **Cultural Services** (including Foreign Relations): Dir: L. Wallenborn.

HOME SERVICE:

FRENCH NETWORK				
Bruxelles I (Nat.)	620 kc	483.9 m	150 kW	(Wavre)
Bruxelles IV (Reg.)	1124 –	266.9 –	10 –	(Aye, Houdeng)*
	1484 –	202.2 –	5 –	(Liège)*

Anlier	(Nat.)	87.6 Mc	10 kW	Bruxelles	(3. prgr.)	96.1 Mc	2 kW
Houdeng	(Reg.)	92.3 –	50 – *	Houdeng	(3. prgr.)	99.1 –	50 –
Ougrée	(Reg.)	90.5 –	50 – *	Liège	(3. prgr.)	99.5 –	10 –
Anlier	(Reg.)	91.5 –	10 – *	Anlier	(3. prgr.)	94.1 –	10 –

* Prgr's from studios in Mons, Namur, Liège.

FM-Ougrée: 88.5Mc 10kW German Prgrs.
620kc rel. on FM 87.6Mc: W 05.30–22.00(Sat 23.00). Sun 05.30–23.00.
N, Wrp: 05.30, 06.00, 07.00, 08.00, 09.00, 11.00, 12.00, 13.00, 15.00 16.00, 17.00, 18.30, 21.00, 21.55. Sat, Sun 22.55 – **Wrp:** 10.50.
1124kc rel. on FM 92.3, 90.5, 91.5Mc: 09.00–14.30, 17.00–22.00.
Symphony Concert: Tues 19.00–21.00.
* Prgr's from studios in Kortrijk, Ghent and Hasselt.

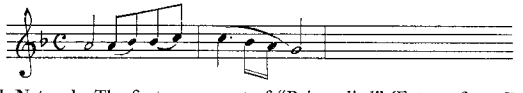
FLEMISH NETWORK

Brussels II (Nat.)	926 kc	324.0 m	150 kW	(Wavre)
Brussels III (Reg.)	1484 –	202.2 m	0.5 –	(Kortrijk)*
	1511 –	198.5 –	20 –	(Veltem)*

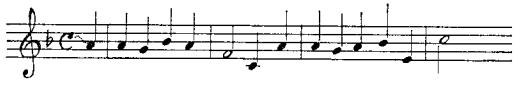
FM-Flemish Network

		Mc	kW			Mc	kW
Aalter	(Nat.)	95.7	10	Veltem	(3. prgr.)	89.5	50
Veltem*	(Reg.)	93.7	50	Aalter	(3. prgr.)	90.4	10
Genk*	(Reg.)	97.9	10	Genk	(3. prgr.)	89.9	10
Aalter*	(Reg.)	98.6	50				

926kc (rel. on FM 95.7Mc):
W 05.30–22.00(Sat 23.00). Sun 05.30–23.00 – **N, Wrp:** 05.30, 06.00, 07.00, 08.00, 11.30, 12.00, 16.00, 18.00, 21.00, 21.55. Sat, Sun 22.00– **Wrp:** 05.30, 07.00, 11.30.
1511kc (rel. on FM 93.7, 97.9 & 98.6Mc): 09.00–13.00, 16.00–22.00.
Symphony Concert: Fri 19.00–21.00.
D 16.00–18.00 or 17.00–19.00 varied prgr. and N.
ANN: F: "Radiodiffusion-Télévision Belge". **Fl:** "Belgische Radio en Televisie". G: "Belgischer Fernseh-Rundfunk" – **INT-SIG:** Xylophone.
F. Network: Extract from Grety's famous melody "Ou peut-on etre mieux."



Fl. Network: The first movement of "Beinaarlied" (Extract from Ruben's cantata by Peter Benoit).



V. by QSL-card or letter. Records accepted –

INTERNATIONAL SERVICE

ADDR: Directions of Overseas Sce. of R.T.B./B.R.T, 18 Place Eugene Flagey, Brussels 5. **Cable:** RTB Mondial, Brussels. **Te:** 48.81.00 – **L.P:** Exec. Dir: F. Zoete. Heads Shortwave: J. Vandenbranden, M. Depré, J. Mertens. Transcription & Public Relations: M. Swaenepol, W. Sanders.
STATIONS: ORU Wavre, ORU 3/ORU4=100kW, ORU5=20kW.

kc	m	kc	m	kc	m	kc	m	kc	m
6140	48.86	9600	31.25	11895	25.22	17795	16.86	17860	16.79
7140	42.02	9745	30.78	15335	19.56	17845	16.80	21510	13.90
9515	31.53	9765	30.72						

Abbreviations: A=French/Flemish; B=French/Flemisch/Congolese; C=Congolese; I=Africa; II=No. America; III=So. America; IV=So. Europe; V=Far East.

Time	L.	Area	kc.				kc
10.00–12.00	B	I	15335	16.00–17.15(W)	C	I	9745
			17860			I	15335
			21510			I	17860
12.15–13.00a)	A	I	17845	17.15–18.30	C	I	9745
		V	17860	17.30–18.15	A	V	15335
		IV	11895			IV	17860
13.30–15.45b)	C	I	15335	18.30–21.00c)	A	I	9515
Sat		I	17860			I	9745
		I	21510			I	17860
13.30–16.30b)	A	I	15335	21.15–23.00d)	A	III	6140
Sun		I	17860			III	9600
		I	21510			III	9745
16.45–17.15b)	A	I	9745	23.15–01.00d)	A	II	7140
Sun		I	15335			II	9745
		I	17860			II	9765

a) for missionaries and seamen (alternatively in French and Flemish); b) Sat (Congolese), Sun (Sport, French/Flemish); c) for Belgians and Africans; d) for Belgian seamen and Belgians in the world, alternatively in French and Flemish.
N: French: 10.30, 11.30, 19.30, 20.00. **Flemish:** 10.15, 11.40, 19.00.
ANN: F: "Ici Bruxelles, Radiodiffusion-Télévision Belge, Emissions Mondiales". Fl:. "Hier is Brussel, de Belgische Radio en Televisie, Wereldomroep" – **SIGNALS:** Starting: Xylophone – **INT-SIG:** Gevaerts "Vers l'avenir". The signal at the start of each broadcast: "Où peut-on être mieux" – Closing: Belgian National Anthem – **V.** by QSL-card. Records accepted.
Brown Boveri, Switzerland: 2×150kW mw-tr's.

BULGARIA (Peoples Rep. of)

L.T: GMT+2 h – Pr.L: Bulgarian.

BULGARIAN RADIO AND TELEVISION (Go.)
FI: By state – **AD:** D 13.30–14.00 – **Fee:** 4.50 levas.
ADDR: Bulgarian Broadcasting at the Committee of Culture and Art, 4, Bd Dragan Zankov Str, Sofia. **Cable:** Bulgarradio. **Te:** 7-10-44. **Telex:** 541 – **L.P:** Dir. Gen: N. Ganchovsky. Gen. Mgr: R. Kamensky. Dir. Tec: J. Jerkov, Chief of Foreign Rel. Dept: Kr. Vladov. Dir. Prgr: V. Nikolov. Dir. TV: V. Baev.

HOME SCE:

	kc	m	kW		kc	m	kW
Sofia II	593	506	200	Varna	1124	267	10
Plovdiv	746	402	30	Kardjali	1160	259	30
Stolnik	773	388	30	Stara Zagora	1223	235	30
Sofia I	827	362.7	100	Kolarovgrad	1295	232	30
Blagoevgrad	863	348	30	Sofia III	7670	39.11	15

1st PRGR: 03.25–08.37 on 593, 1124, 1223kc, 08.37–09.55 on 593, 827, 7670kc, 09.55–14.55 on 593, 827, 1124, 1223, 7670kc, 14.55–20.30 on 593kc, 20.30–22.00 on 593, 1124, 1223kc. **N:** 03.30, 04.30, 06.00, 07.00, 08.30, 10.30, 12.00, 14.00, 15.00, 16.00, 16.55, 18.30, 20.30, 21.50 – **L.L:** Russian: Mon 16.30, English: Fri 16.30, French: Wed 15.30 – **Folklore Music:** Mostly at 04.00–06.00, 10.00–14.00, 16.00–18.00. **Symphony:** Tues, Thurs 17.30.
2nd PRGR: 14.55(Sun 08.30)–20.30 on 827, 1124, 1223kc.

FOREIGN SERVICE

827 kc	362.7 m	100 kW	7670 kc	39.11 m	15 kW
1160 –	259.3 –	30 –	9560 –	31.38 –	50 –
6070 –	49.42 –	120 –	9700 –	30.93 –	120 –
6170 –	48.62 –	50 –	11715 –	25.61 –	100 –
7255 –	41.35 –	120 –	15330 –	19.57 –	120 –
7295 –	41.12 –	50 –			

Schedule 20/10 64–20/4 65

TO EUROPE/MID. EAST

Arabic kc
11.30–11.55 9700, 11715, 15330
17.00–17.55 6070, 7255, 9700
19.30–20.00 6170, 7255, 7670

Bulgarian
12.30–12.40 6070, 7255, 9700
22.00–22.10 6070, 6170, 7670

English
19.30–20.00 6070
21.30–22.00 6070
00.00–00.30[1] 6070

Esperanto
19.00–19.25(Sun) 7255, 11715

French
19.00–19.30 6070
21.00–21.30 6070

German
20.00–21.00 6070
23.30–23.55 6070

Greek
05.30–06.30(Sun) 827, 6170, 7255
06.00–06.30 827, 1160, 6070, 7670
12.00–12.30 6070, 7255, 9700
16.00–16.25 6070, 7255, 9700
19.00–19.30 6170, 7255, 7670, 1160
20.30–21.00 827, 1160, 6170, 7255, 7670

Italian
18.00–18.25 6070, 6170, 7255
21.00–21.30 6170, 7255, 7290, 7670
22.00–22.30[2] 827

Macedonian
05.00–05.30 827, 6070, 7670
06.30–07.30(Sun) 827, 6070, 7670
21.00–21.30 827

Serbo-Croatian
07.30–08.30(Sun) 827, 6070, 7670
21.30–22.00 827, 6170, 7670

Spanish
20.30–21.00 7290, 11715

Turkish
05.30–06.00 827, 962, 1160, 7670, 6070
05.30–06.30(Sun) 962, 1160, 6070, 7670
11.00–11.30 7255, 9700, 11715
16.30–16.55 962, 6070, 7255,
16.30–16.55 962, 6070, 7255, 9700
18.30–19.00 1160, 6170, 7255, 7290, 7670
20.00–20.30 1160, 6170, 7255, 7670

TO AFRICA

English
19.05–19.30* 9700, 11715
22.00–22.25**7255, 9700, 11715

French
19.30–20.00* 9700, 11715
21.30–22.00**7255, 9700, 11715
* to Ea. Af; ** to We. Af.

TO NO. AMERICA

Bulgarian
23.30–24.00 6070
01.00–01.30 6070

English
00.00–01.00 6070
04.00–04.30 6070

TO SO. AMERICA

Bulgarian
23.00–23.25 7255, 9700, 11755
00.30–01.00 7255, 9700

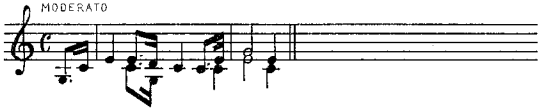
Spanish
22.30–23.00 7255, 9700, 11715
00.00–00.30 7255, 9700
02.00–02.30 7255, 9700

[1] Concert (also for No. America) – [2] exc. Sat.

DX-PRGR: English: Fri 19.30, 21.30 (to Gt. Britain); Sat 01.00 04,00 (to USA); **German:** 1st & 3rd Sun 20.00; **French:** 1st Sun at 21.00; **Spanish:** 2nd Thurs 20.30, 22.30, Fri 00.00.

ANN: Home Sce: "Govori Sofia" – Foreign Sce: E: "This is Sofia Bulgaria Calling". F: "Ici Sofia, Radiodiffusion-Television Bulgare". Tu: "Burasi Sofia radiosu". Gr: "Milai i Sofia". G: "Hier spricht

Sofia Bulgarian". I: "Que é Radio Sofia". Arabic: "Huna Sofia". Sp: "Habla Sofia" – **INT-SIG:** Youth March played on organola.



V. by QSL-card or letter. Records accepted – **PUB:** Prgr.schedule.
Wilhelm Franz KG, Germany: EMT studio equip.

CZECHOSLOVAKIA

L.T: GMT+1 h – **Pr.L:** Czech, Slovak.

CESKOSLOVENSKY ROZHLAS (Go.)
FI: By license payments – **AD:** Tues 17.50, Wed 16.30, Fri 14.30, Sat 16.35, Sun 21.20.
ADDR: Czechoslovak Radio, Praha 2, Vinohradska 12. **Cable:** Radiopraha. **Te:** 2115 – **L.P:** Dir. Gen: K. Hoffmann. Dep. Dir. Gen: Dr. M. Marko. Dept. Dir. Gen: R. Behal (Prgr), Dep. Dir. Gen: K. Hrabal (Foreign Sce). Dep. Dir. Gen: M. Junek (Engineering). Dep. Dir. Gen: J. Janousek (Adm). Head Foreign Rel: K. Reif.

HOME SERVICE: Medium Wave

Name	kc	m	kW		kc	m	kW
ČS I	272	1102.9	200	Bratislava	1232	243.5	100
Praha	638	470.2	150	ČS I	1286	233.3	100
Bratislava	701	427.2	100	Praha	1484	202.2	2
Praha	953	314.7	100	Bratislava	1484	202.2	2
Praha	953	314.7	15	ČS I	1520	197.3	1
Bratislava	1097	273.5	150	Ostrava	1594	188.0	2

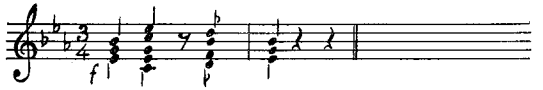
FM:	Mc	kW		Mc	kW
Praha	68.96	4	No-Moravia	69.08	4
	71.63	4		66.32	4
East Bohemia	69.35	4	West Slovakia	68.84	8
	67.22	1		66.98	8
No. –	70.58	4	Mid. Slovakia	69.68	8
	72.20	4		72.50	8
We. –	69.56	8	East Slovakia	68.87	8
	67.34	8		66.38	8
So. –	70.07	8	Zilina	69.50	1
	66.83	8		71.60	1
Mid-Moravia	69.86	8	Tatry	69.20	1
	71.87	8		67.28	1

ČS I: Czech, Slovak: 03.30(Sun 05.00)–23.00. **N, Wrp:** W 03.30, 04.00, 04.30, 05.00, 05.30, 06.00, 08.30, 11.30, 15.00, 17.00, 20.00, 22.00. Sun 05.00, 06.45, 08.00, 12.00, 17.00, 20.00, 22.00 – **Night Concert** (with multilingual ann): Tues, Thurs, Fri, Sat 22.15–23.00 – **L.L: Spanish:** Tues 10.20–10.40, Thurs 17.05–17.25.

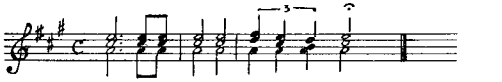
PRAHA: Czech: 03.30(Sun 05.00)–01.00. **N, Wrp:** W 03.30, 04.00, 04.30, 05.00, 05.30, 06.00, 08.00, 10.00, 12.00, 14.00, 18.00, 21.00, 22.50. Sun 05.00, 06.45, 11.05, 18.00, 21.00, 22.50 – **L.L: Russian:** Wed 15.30–15.45 – **Spanish:** Thurs 15.40–16.00 – **Night Concerts** (with multilingual ann): Mon, Wed, Sun 22.00–22.50.
Bulgarian: On 1520/1286kc: Sat 11.45–12.15, 16.30–17.00.
Polish: On 1520/1594kc: W 15.50–16.00, Tues 10.30–11.00.
German: On 701/1520kc: W 16.00–16.15, Sun 08.00–09.00.

BRATISLAVA: N, Wrp: W 03.30, 04.00, 05.00, 06.00, 10.00, 12.00, 14.00, 16.00, 18.00, 21.00, 22.55, Sun 05.00, 06.45, 11.30, 18.00, 21.00, 22.55 – **L.L: Russian:** Thurs 15.00–15.15 – **Hungarian:** Mon–Fri 06.00–06.15, 06.50–07.00, 11.00–12.00, 14.00–15.00, Sat 06.00–06.15, 06.50–07.00, 11.00–15.00, Sun 07.00–15.00 – **Ukrainian:** Mon–Fri 06.15–06.25, 15.00–15.30, Sat 06.15–06.25, 15.00–16.00, Sun 06.00–06.45, 13.00–13.40.

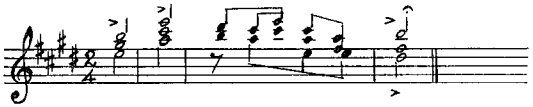
INT-SIG:
Praha: The two opening bars of Smetana's symphonic Poem "Vysehrad".



CS: Fanfares from a March by V. Dobiás.



Bratislava: Fanfares from a March by B. Urbanec:



AKG, Austria: delivered studio equip. (recorders, microphones).
Wilhelm Franz KG, Germany: EMT studio equip.

FOREIGN SERVICE: 100kW exc. 1097kc 150kW.

kc	m	kc	m	kc	m	kc	m
1097	273.5	7115	42.16	11895	25.22	15448	19.42
1286	233.3	7345	40.85	11990	25.02	17825	16.83
5930	50.57	9505	31.56	15230	19.70	21450	13.99
6135	48.90	9795	31.56	15285	19.63		

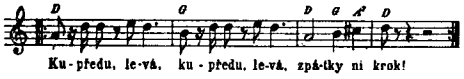
FOREIGN SERVICE
a=Europe; b=So. Ea. Europe; c=No. We. Europe; d=Near & Mid-East/So. Ea. Asia; e=Australia/New Zealand; f=Africa; g=We. Africa; h=Ea. Africa; i=No. America (East); j=No. America (Central); k=No. America (West); m=So. America (East); n=So. America (East); o=So. America (West).

Arabic	kc
16.30–17.30	7245/9795(h) 11990(h)
20.00–21.00	5930(n, g, a), 7345(h), 9795/11990(g)
Czech	
07.30–08.00	6055(a), 9505(e, a) 15285(f) 15230/21450(d)
21.00–21.30	5930(n, o)
22.30–23.00	7345/9795(n) 11990(i)
03.00–03.30	5930/7115/7345(i) 9795(k), 11900(i)
English	
08.00–09.00	6055(a), 9505(e, a) 15230/15285(d) 21450(d)
12.00–12.30	6135/11895(c)
15.00–16.00*	15285/15448(i, j) 17825(i, j)
16.00–16.30	7245/11990(h) 15448(g)
17.30–18.00	7245/11990(h) 9795(g)
19.00–19.30	5930/7345/9795(e)
01.00–02.00	5930/7345/9795(e)
03.30–04.30	9795(k), 11990(i)
French	
11.00–12.00	6055/9505(a)
18.00–18.30	7245/11990(h) 9795(g)
19.30–20.00	5930(h, g, a) 7345(h) 9795/11990(g)

German	kc
09.00–10.30	6055/9505(a)
10.30–11.00	6055/6135/9505(a)
11.00–11.30	6135(a)
Greek	
11.30–12.00	5995(a), 11895(b)
17.20–18.00	5930/7345(a)
Italian	
07.00–08.00*	6055(a)
12.00–13.00	6055/9505(a)
17.00–17.30	5930/7345(a)
Portuguese	
21.30–22.00	5930(n, o), 7345(n) 9795/11990(n)
00.00–01.00	5930/7115/7345(n) 9795/11990(n)
Serbo-Croat	
09.30–10.00*	6135/11960(a)
15.30–16.00	6055/7345(a)
18.00–18.30	5930/7345(a)
Spanish	
12.30–13.00**	6135(a)
13.00–13.30	11895/15285(c)
23.00–24.00	5930/7115/7345(n) 9795/11990(n)
02.00–03.00	5930/7345/11990(i) 7115/9795(k)
Swedish	
10.00–10.30	6135/11960(a)
13.00–13.45	6055/9505(a)
16.30–17.00	5930/7345(a)

*Sun only – ** Sat/Sun only.

On 1286kc: English: 22.00–22.30; **French:** 20.30–21.00, 21.30–22.00; **German:** 17.15–18.00, 18.00–18.30, 19.00–19.30, 20.00–20.30; **Italian:** 18.30–19.00; **Spanish:** 23.00–23.30. **On 1097kc: English:** 23.05–23.30.
Prgr's for radioamateurs and SWL's:
English (to No. Am. and Pacific): On alternate Thurs. (repeated Sun) at 20.00 and 22.30 EST. The repeat for Far East and Australia is heard on alternate Fri (Mon) at 08.00 – **English** (to Europe): Every first and third Mon at 19.00 and repeated at 22.00 – **Swedish:** Every Thurs at 16.30, Fri 10.00 (repeat) – **German:** Every first Thurs 19.00. For Austria: Every third Sun at 11.00 repeated following Mon 17.15, Tues 11.00.
ANN: E: "This is Prague" – **Arabic:** "Huna Pragh" – **F:** "Ici Prague, Tchécoslovaquie" – **I:** "Qui Praga, Cecoslovacchia" – **G:** "Hier spricht Prag" – **Greek:** "Edo Praga" – **Yugoslavian:** "Govori Prag" – **Sp:** "Aqui Radio Praga, Checoslovaquia" – **P:** "Aqui fala a Radio Praga" – **Swedish:** "Här är Prag" – **Czech/Slovak:** "Poslouchate Prahu, vysíláni Cs. rozhlasu pro krajany" – **INT-SIG:** The opening bars of the song "Forward Left" by J. Seidl, played on trumpets.



V. by QSL-card and letter. Records accepted – **PUB:** Foreign Sce. sched. free on request.

GREETINGS FROM

RADIO ★ PRAHA

ČSSR

RADIO PRAGUE

Broadcasting daily in English, Arabic, Czech, Slovak, French, German, Greek, Italian, Portuguese, Serbo-Croat, Spanish and Swedish – programmes of world news and views, reports from Czechoslovakia, music. Programmes also include answers to listeners, musical requests and regular columns for radioamateurs, DXers, and stamp collectors.

A MESSAGE TO SWLs

Radio Prague is carrying out a continuous reception survey. *All correct reception reports are verified.* Listeners participating regularly in the monitoring work for the short-wave propagation department receive valuable souvenirs from Czechoslovakia.

FOR DETAILS WRITE TO:

RADIO PRAGUE – PRAGUE 2 – CZECHOSLOVAKIA

See editoral text page 98

DENMARK

L.T: GMT+1 h – **Pr.L:** Danish.

RADIO DENMARK (Go.)

FI: By license payments – **Fee:** D.Kr. 35.00
ADDR: Radiohouse, Rosenørnsalle 22, Copenhagen V – **Cable:** Danradio. **Te:** 350647 – **L.P:** Dir. Gen: Erik Carlsen. Dir. Prgr:(radio) Aksel Dahlerup. Dir. Prgr(TV): Jens Fr. Lawaetz. Dir. Adm: Ejnar Jensen. Dir. Secretariate and Personnel: Vacant. Dir. Music: Vagn Kappel. Dir. Drama(radio): Jørgen Claudi. Dir. Entertainment(radio): Niels-Jørgen Kaiser. Dir. Entertainment(TV): Svend Pedersen. Dir. Press & Foreign Rel: P. Berg. Dir. Tec(radio+TV): Fr. Heegaard. Dir. Tec(radio): H.C. Jørgensen. Dir. Tec(TV): P. Hansen. Dir. N: N. Grunnet. Dir. Actualities and Culturdept(radio): Jørgen Vedel-Petersen. Dir. Children, Youth and School Broadc.(radio and TV): Valdemar Christensen. Dir. Actualities Dept(TV): Hans Jørgen Jensen. Dir. Cultur Dept: L. Bindsløv. Dir. Drama(TV): Felix Nørgaard.

STATIONS: Long & Medium Waves:

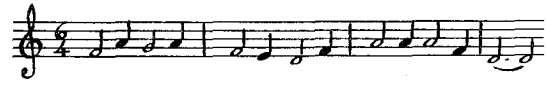
	kc	m	kW	Prgr
Kalundborg	245	1224	150	I
Kalundborg	1061	283	60	II
København	1430	210	10	II
Skive	1430	210	70	II
København	1484	202	2	I
Ålborg	1484	202	0.25	II
Tønder	1484	202	2	II
Esbjerg	1594	188	2	II

FM:

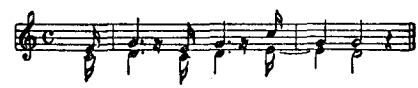
	Mc	kW	Prgr.
Århus	88.1	30	III
Fyn	89.0	60	I
Ålborg	89.7	30	III
Bornholm	90.0	30	III
Vestjylland	90.2	60	I
København	90.8	60	I
Århus	91.7	30	I
Fyn	92.6	60	III
Vestjylland	92.9	60	III
Ålborg	93.3	30	I
København	93.85	60	III
Bornholm	94.5	30	I
Sydsjælland	94.8	60	I
Sønderjylland	95.1	50	I
Århus	95.9	30	II
København	96.5	60	II
Fyn	96.8	60	II
Sønderjylland	97.2	50	III
Sydsjælland	97.5	60	II
Ålborg	98.1	30	II
Vestjylland	98.5	60	II
Bornholm	99.3	30	II
Sydsjælland	99.6	60	III
Sønderjylland	99.9	50	II

HOME SCE:
1st Prgr: W 05.00–23.05, Sun 07.00–23.05.
N: 05.00(W), 06.00(W), 07.00, 08.00(W), 11.30, 14.00(W), 17.30, 21.00, 22.00(exc. Sat), 23.00 – **Wrp:** 07.45, 10.50(W), 17.05 – **L.L: English:** Tues, Fri 08.45–09.05. **German:** 2nd & 4th Sun 07.05–07.25 – **Request Prgr:** Sun 11.00–13.00. Tues 18.00–19.00 – **Rlg:** Sun 09.00, 13.00, W 07.30.
2nd Prgr: W: 16.00–22.05(Sat 23.05). Sun: 07.00–11.00, 16.00–22.05. Mon 18.00–18.45 not on 1061kc (Kalundborg) and 1430kc (Copenhagen). N: 17.30, 21.00(exc. Sat), 23.00.
L.L: English: Mon, Thurs 16.40–17.00, Tues 16.00–16.20. **German:** Mon, Thurs 16.20–16.40, Sun 07.40–08.00. **French:** Sun 07.20–07.40. **Italian:** Mon, Thurs 16.00–16.20. **Russian:** Tues 16.20–16.40. **Swedish:** Sun 07.40–08.00 (twice monthly).
3rd Prgr (Musical Prgr): W 05.00–07.05, 11.00–23.05, Sun 11.00–23.05 (this prgr. is also relayed by the tr's of the 2nd prgr: Mon–Fri 05.00–07.05, 11.00–16.00, 22.00–23.05, Sat 05.00–07.05, 11.00–16.00, Sun 11.00–16.00, 22.00–23.05. N: hourly.
Reg. Prgr's: Mon 18.00–18.45 on Nordjylland (North Jutland): 1484kc, 98.1Mc (Ålborg) – Midtjylland (Mid Jutland): 1430kc (Skive), 95.9Mc (Århus), 98.5Mc (Vestjylland – West Jutland) – Sydjylland (South Jutland): 1484kc (Tønder), 1594kc (Esbjerg), 99.9Mc (Sønderjylland – South Jutland) – Fyn (Funen): 96.8Mc – Sjælland (Seeland): 97.5Mc – København (Copenhagen): 96.5Mc – Bornholm: 99.3Mc.

ANN: "Danmarks Radio, Program I" (Program II) – **INT-SIG:** Prgr. I: From an old Danish folksong. **D.** at 11.00 and 19.00: The chimes of the Town Hall in Copenhagen.



Prgr. II:



FOREIGN SERVICE: (DS=Danish Ships)

kc	m	kW	kc	m	kW	kc	m	kW
OZF3 6060	49.50	50	OZF5 9520	31.51	50	OZF9 15320	19.58	50
OZF4 7260	41.32	50	OZF7 15165	19.78	50			

Times	kc	Area	News (D=Danish)
01.00–01.30	9520	DS (No. Am.)	01.00(D)
01.30–02.30	9520	No. Am.	01.30(D), 02.00(E)
06.30–07.00	15165*	DS (Au/NZ)	06.30(D)
09.00–10.00[1]	15165*	FE, Au, NZ	09.00(D), 09.30(E)
12.00–13.00	15165	No. Am.	12.00(D), 12.30(E)
13.15–13.45	15165	Greenland	13.15(D)
14.00–14.30	15165	DS (So. Asia)	14.00(D)
14.30–15.30[1]	15165	So. Asia	14.30(D), 15.00(E)
16.00–16.30	15165	DS (Medit)	16.00(D)
17.30–18.10[2]	9520	Greenland	17.30(D)
18.30–19.30	15165	So. Africa	18.30(D), 19.00(E)
19.45–20.45	9520	No. Af, ME	19.45(D), 20.15(E)
21.15–21.45	9520	DS (So Am)	21.15(D)
21.45–22.45[3]	9520	So. Am	21.45(D),22.25(Sp)

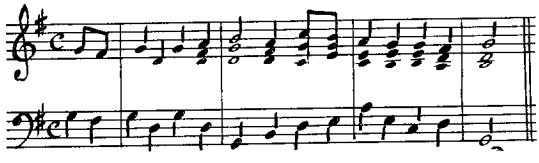
[1] Tues, Thurs, Sat; [2] Home Sce, [3] Mon, Wed, Fri, * on 9520kc during March/April.

All broadcasts are of one h duration, and generally consist of 30 min's in Danish and 30 min's in E. (So.Am: 40 min's in Danish and 20 min's in Sp.) – All broadcasts commence with N. in Danish; and in E and Sp. respectively, at the beginning of the E and Sp. portions of the prgr.

Outline of week's prgr. in Danish and E as broadcast to No.Am. and Af: **Mon:** N. Literature, N. Classical, Da. Music, D. Views on the N)– **Tues:** N. Reportage, N. On-the-Spot. **DX-Bulletin** (DX-Bull. comes on 8 to 10 min's before sign off, Thurs for FE, Au, NZ & So.As.) – **Wed:** N. Light prgr, N. Folk Music, Actualities – **Thurs:** N. Denmark round, N. Concert or Features – **Fri:** N. Oldfashioned, Econ. or Agri. Review, N. Light Music. Anything – Anybody – **Sat** Shortwaving to the world (mbg. & request prgr.) – **Sun:** Weekly N-Roundup, Church Services, Reportages, etc. (generally all Danish).

Thrice-weekly prgr. to So.America and FE-Au-NZ-So.As. follow the above general outline.

ANN: "Danmarks Kortbølgesender" – "You are tuned to the Voice of Denmark" – All tr. begin with the chimes of the Town Hall followed by the National Anthem (exc. DS which commence with 8 bells) – **INT-SIG:** The first bars of "Som en rejselysten Fløde" composed by Carl Nielsen:



Message to Listeners: Radio Denmark is anxious to receive reports on prgr. and on reception conditions from all parts of the world. It makes every endeavour to get into touch with countrymen and listeners in countries abroad with a view to provide the best possible s.w. sce – V. by letter or QSL-card. Records accepted. **PUB:** "Voice of Denmark" (quarterly) mailed upon request.

AKG, Austria delivered studio equip. (recorders, microphones). Telefunken, Germany: studio equip.

The Marconi Company Ltd, G.B: delivered m.w. tr's: Århus 5kW, Fyn 5kW, Skive 100kW, Kalundborg 3×100, 8×5kW – Ant: Ålborg, Bornholm, Næstved, Vestjylland – studio equip: Ålborg, Århus, Bornholm, Fyn. – Wilhelm Franz KG, Germany: EMT studio equip.

FAROE ISLANDS (Danish Territory)

L.T: GMT – **Pr.L:** Faroese.

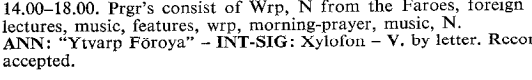
UTVARP FØROYA

ADDR: Torshavn. **Te:** 2437. **Telex:** 26 – **L.P:** Mgr: N. J. Arge.

STATION: 584kc 513m 5kW.

HOME SCE: Mon–Fri: 07.15–07.45 (1/9–31/3), 12.20–12.50, 18.30–20.00. Sat 07.15–07.45 (1/9–31/3), 12.20–12.50, 18.30–21.00. Sun 14.00–18.00. Prgr's consist of Wrp, N from the Faroes, foreign N, lectures, music, features, wrp, morning-prayer, music, N.

ANN: "Ytvarp Föroya" – **INT-SIG:** Xylofon – V. by letter. Records accepted.



The Marconi Company Ltd, G.B, delivered 5kW tr.

FINLAND

L.T: GMT+2 h – **Pr.L:** Finnish, Swedish.

OY YLEISRADIO AB (Go.)

FI: By license payments – **ADDR:** Unioninkatu 16, Helsinki. **Cable:** Yleisradio. **Te:** 630691. Telex 12-735 – **L.P:** Dir. Gen: E. Sundström. Dir. Finnish Prgr: J. Koskiluoma. Dir. Swedish Prgr: Ch. Schildt. Dir. Tec: P. Arni. Assist. Dir's: L.H. Vennola, V. Zilliacus (TV-prgr), E. Vallila.

STATIONS: Long & Medium Waves:

	kc	m	kW	Prgr group		kc	m	kw	Prgr group
Helsinki I	557	539	100	D	Pori	1484	202	1	A
Helsinki II	1412	212	2	B	Tampere	1421	211	1	A
Joensuu	520	577	1	A	Turku I	962	312	100	D
Kuopio	755	397	20	A	Turku II	1412	212	0.4	B
Lahti	254	1181	200	A	Vaasa	1241	242	25	D
Oulu	433	693	10	A	Ylivieska	836	359	10	A
Pietarsaari	1484	202	1	C					

FM	Mc	kW	Prgr group	FM	Mc	kW	Prgr group
Forssa I	92.8	0.1	A	Mikkeli I	88.9	25	A
Forssa II	89.2	0.1	B	Mikkeli II	94.6	25	B
Helsinki I	94.0	40	A	Oulu I	90.4	50	A
Helsinki II	98.8	40	B	Oulu II	97.3	50	B
Helsinki III	91.9	40	C	Pello	98.2	15	A
Iisalmi I	87.7	0.7	A	Pietarsaari	94.3	10	C
Iisalmi II	92.8	0.7	B	Pihtipudas I	97.0	10	A
Joutseno I	90.7	25	A	Pihtipudas II	88.6	10	B
Joutseno II	88.0	25	B	Pori I	97.3	10	A
Jyväskylä I	92.5	25	A	Pori II	87.7	0.1	B
Jyväskylä	89.9	25	B	Pori III	99.4	3	C
Kajaani I	94.3	40	A	Pyhätunturi	97.6	15	A
Kajaani II	98.9	40	B	Rauma	92.0	0.3	A
Karigasniemi	93.4	0.02	A	Rovaniemi I	96.7	10	A
Kaunispää	98.8	15	A	Rovaniemi II	94.0	10	B
Kerimäki I	95.8	15	A	Sammaltunturi	95.2	15	A
Kerimäki II	99.1	15	B	Taivalkoski I	89.2	45	A
Kilpisjärvi	89.4	0.01W	A	Taivalkoski II	91.9	45	B
Kokkola I	99.7	0.7	A	Tammisaari I	97.0	3	A
Kokkola II	97.6	0.7	B	Tammisaari II	99.7	3	B
Koli I	90.1	15	A	Tammisaari III	93.1	3	C
Koli II	93.4	15	B	Tampere I	93.7	45	A
Kotka I	92.8	0.3	A	Tampere II	90.7	45	B
Kotka II	96.4	0.3	B	Tervola I	92.2	10	A
Kristiina I	94.6	10	A	Tervola II	89.5	10	B
Kristiina II	91.0	10	C	Turku I	94.3	25	A
Kuopio I	91.6	25	A	Turku II	89.8	15	B
Kuopio II	96.2	25	B	Turku III	98.2	25	C
Lahti I	95.5	40	A	Vaasa	95.2	6	C
Lahti II	97.9	40	B	Ylivieska I	94.0	15	A
Lapua I	90.1	60	A	Ylivieska II	96.1	15	B
Lapua II	93.1	60	B	Ahtäri I	94.9	1	A
Loviisa	89.2	0.05	C	Ahtäri II	88.0	1	B
Mariehamn	91.3	5	C	Utsjoki	87.9	0.01W	A

HOME SERVICE: All st's: W 04.00–22.00, Sun 05.30–22.00. **N:** W 04.00, 06.00, 09.30, 10.30, 14.50, 17.00, 20.00, Sun 06.30, 10.30, 17.00, 20.00 – **Wrp:** 06.00(Sun 06.30), 10.30, 17.00, 20.00 – **Wrp for seas** (in Finnish & Swedish): Groups C+D 11.00 (also on 254, 433), 17.10, 20.10.

Swedish N: Groups C+D: W 04.10, 06.10, 09.35, 10.40, 14.55, 17.20, 20.10. Sun 06.40, 10.40, 17.20, 20.10 – **Wrp:** 06.10(Sun 06.40), 10.40, 17.20, 20.20.

First prgr: Group A: Both light and serious prgr. Regular prgr's: Morning Services W 05.45, Evening Services W 17.30, Divine Service: Sun 08.00.

Second prgr: Group B: Light musical prgr to 16.00 and after 20.20. Serious prgr: 16.00–20.00(Mon 16.00–18.00).

Bilingual prgr: Groups C+D: Swedish 16.00–20.00(Tues, Fri 18.05, Sun 19.00) plus odd hours in the day. Other times: Finnish first or second prgr.

Exclusively Swedish: FM Mariehamn 81.3Mc.

FOREIGN SERVICE

Stations: Pori

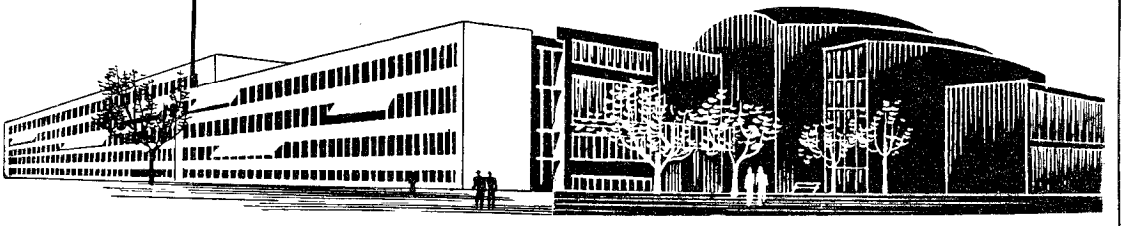
OIX7 6120kc 49.02m 15kW	OIX8 11805kc 25.41m 10kW
OIX2 9555kc 31.40m 15kW	OIX4 15185kc 19.76m 100kW

ENGLISH

For Europe on 9555/11805/15185kc: Mon 16.00–16.30 "Finland ia Mixture"; Fri 16.00–17.00 "DX-Mailbag Show"; repeat Fri 21.00 on 6120kc.

Listen to
THE VOICE OF DENMARK

The Danish shortwave transmissions are beamed to North America, South America, Africa, India and the Far East



To North America daily on 19.78 m – 15.165 kc/s, 12.00 – 13.00 GMT – 07.00 – 08.00 a. m. E. S T. and on 31.51 m – 9.520 kc/s, 01.30 – 02.30 GMT – 8.30 – 9.30 p. m. E. S.T.
DX-Bulletin: Tuesdays about 7.50 a. m. and 9.20 p. m. E. S .T.

To South America on 31.51 m – 9.520 kc/s.
Mondays, Wednesdays and Fridays 21.45 – 22.45 GMT.

To Far East, Australia and New Zealand on 19.78 m – 15.165 kc/s.
Tuesdays, Thursdays and Saturdays 9.00 – 10.00 a. m. GMT.
DX-bulletin: Thursdays 9.50 – 10.00 a. m. GMT.

To South Asia on 19.78 m – 15.165 kc/s.
Tuesdays, Thursdays and Saturdays 14.30 – 15.30 GMT.
DX-bulletin: Thursdays 15.20 – 15.30 GMT.

To North Africa and Near East on 31.51 m – 9.520 kc/s.
Daily 19.45 – 20.45 GMT.
DX-bulletin: Tuesdays about 20.35 GMT.

To South Africa on 19.78 m – 15.165 mc/s.
Daily 18.30 – 19.30 GMT.
DX-bulletin: Tuesdays about 19.20 GMT.

Special broadcasts to Danish ships daily 06.30–07.00 GMT. Far East 19.78 m–15.165 kc/s, 14.00 – 14.30 GMT. South Asia 19.78 m – 15.165 kc/s, 16.00 – 16.30 GMT. Mediterranean and Middle East 31.51 m–9.520 kc/s, 21.15–21.45 GMT. South America 31.51 m – 9.520 kc, and 01.00–01.30 GMT. North America 31.51 m – 9.520 kc/s.

Listeners all over the world are invited to send reception reports together with their criticisms and programme suggestions to

the **SHORTWAVE DEPARTMENT, RADIO HOUSE, COPENHAGEN V., DENMARK**

Answer by letter or QSL-card

Repeat for Europe on 9555/11805kc **for No. America** on 15185kc: Sept to May: Tues 12.15–12.45, Sat 12.15–13.15. May to Sept: Mon 20.30–21.00, Fri 20.30–21.30.

FINNISH & SWEDISH

For Europe: On 6120kc: W 04.00–22.00 (Fri 21.00), Sun 06.30–22.00 rel. Home Sce, bilingual prgr.

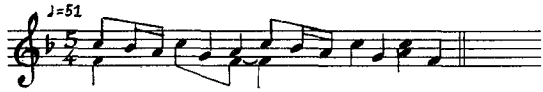
On 9555/11805kc: W 06.00–06.20, Sun 06.30–06.50 N in Finnish & Swedish – W(only in summer): 14.50–15.10. N in Finnish & Swedish. On 9555/11805/15185kc: 10.00–11.10, 16.00–18.30(Mon 16.30–18.30, Fri 17.00–18.30). **Swedish**: Tues, Fri, Sat 17.30–18.30, Wed 17.40–18.30. **N, Wrp**: Finnish 10.30, 17.00, Swedish 10.40. **Wrp for seas** (in Finnish & Swedish): 11.00.

Prgr. for seamen (Finnish & Swedish): Sun & holidays 17.30–18.30. **Repeat for Europe** on 9555/11805kc, **for North America** on 15185kc (same prgr. as to Europe 16.00–18.30):

Sept–May (repeat from the day before): 12.15–15.10 (Tues 12.45–15.10, Sat 13.15–15.10); May–Sept: 20.30–23.00 (Mon 21.00–23.00, Fri 21.30–23.00).

ANN: Before and after each tr. there are st. ann. in Finnish, Swedish, English, French, Spanish, and German. Finnish: "Suomen Yleisradio". Swedish: "Finlands Rundradio". English: "You are tuned to the Finnish Broadcasting Company".

INT-SIG: Based on an old Finnish Folk melody – V. by QSL-card.



PUB: Prgr-schedules to Listeners: duplicated schedules of the short wave tr's containing the same information as given in the World Radio Television Handbook, can be obtained by writing to DX-Editor" of the Finnish Broadc. co.

Station and studio equipment (radio):
The Marconi Company Ltd, G.B: mw-tr, Helsinki 100kW – Brown Boveri Switzerland: lw-tr. Lahti 2×100kW, mw-tr. Turku 100kW, mw-tr. Oulu 25kW, mw-tr. Vaasa 25kW – RCA, USA, Philips, Holland: FM-tr's – Telefunken AG, Germany: studio equip, (recorders, microphones) Wilhelm Franz KG, Germany: EMT studio equip.

FRANCE

L.T: GMT+1 h – Pr.L: French.

OFFICE DE RADIODIFFUSION-TELEVISION FRANCAISE (Go.)
Central Service:

ADDR: Maison de la Radio-Télévision 116, Avenue du President Kennedy, Paris 16. **Cable**: RTFDIR. **Te**: 224-22-22. **Regional Service**: 32-34, rue Ulysse Gavon, Bordeaux – 36, Bd. de la Liberté, Lille – 6 Bd. Victor Hugo, Limoges – 20, Quai Gailleton, Lyon – 2 allée Ray Grassi (Paric Chanot), Marseille – 6, Avenue Hippolyte Maringer, Nancy – 9, Avenue Janvier, Rennes – Place de Bordeaux, Strasbourg – 78, allées Jean Jaurès, Toulouse.

L.P: Prés du Conseil d'Adm: M. W. d'Ormesson. Dir. Gen: M. J. B. Dupont. Dir. Gen. Adjoint: M. A. Astoux. Dir. Gen. Adjoint, Dir TV: M. C. Contamine. Chef des Services de la Recherche et de la Formation Professionelle. M. P. Schaeffer. Secr. Gen des Comités de Programmes: M. G. E. Clancier. Chef des Services des Relations Publiques et des Affaires Commerciales: M. S. de Gozdawa. Délegué du Dir. Gen. aux Stations Régionales: M. B. Gouley. Dir. de l'Equipement et des Services d'Exploitation: M. C. Mercier. Dir. Adjoint de l'Equipement: M. G. Chedeville. Dir. de l'Adm Générale: M. G. Riou. Dir. de la Radiodiff: M. P. de Boisdeffre. Dir. Adjoint de la Radiodiff: M. R. Dhordain. Dir. des Rel. Extérieures: M. J. Flaud. Dir. Adj. des Rel. Extérieures, Chef des Services des Echanges Internationaux: M. M. Robida (radio) M. L. Renault (TV).

HOME SERVICE

FRANCE-INTER "JEUNESSE"

	kc	m	kW		kc	m	kW
Allouis	164	1829	250/ 500*	Strasbourg III	1493	201	1
				Toulouse III	1493	201	1
Grenoble II	1484	202	0.05	Nice I	1554	193	60
Montpellier II	1484	202	1	Nimes	1594	188	1
Perpignan	1484	202	1	Toulon	1594	188	0.05
Brest III	1493	201	0.05	Allouis	6175	48.48	100
Marseille III	1493	201	1	* 500kW d 05.00–23.00.			

D.PRGR: On 164kc: 24 h exc. Fri 03.03–04.00; other tr's 05.00–19.30: RTF-Inter Prgr. 19.30–23.00: Inter-Jeunesse Prgr. 23.00–05.00 (164kc only): Inter Actualités, Route de Nuit. **N**: 23.01, 24.00 and every h on the h to 22.00.

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Every month first-hand information on the world of broadcasting is offered to you in the

EBU REVIEW

Published in English and French by the European Broadcasting Union

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special numbers are published on key subjects, including educational broadcasting, television graphics, agricultural broadcasting, Eurovision.

ANNUAL SUBSCRIPTION

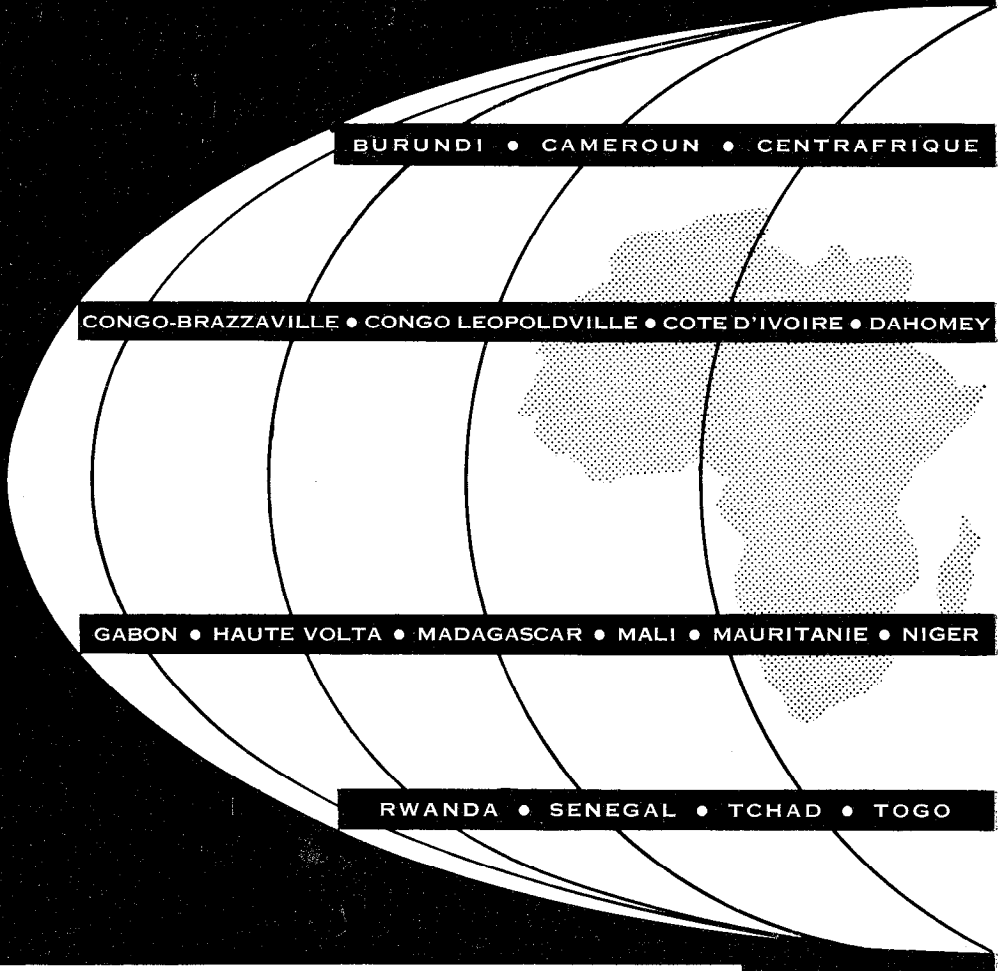
Part A (six numbers): 150 Belgian francs. Publishers: EBU Technical Centre, 32 Avenue Albert Lancaster, Brussels, Belgium.

Part B (six numbers): 15 Swiss francs. Publishers: EBU Administrative Office, 1 rue de Varembé, 1200 Geneva, Switzerland.

A combined subscription to Parts A and B (12 numbers) may be ordered either from Brussels or Geneva (price 300 Belgian francs or 27 Swiss francs).

OCORA

OFFICE DE COOPÉRATION RADIOPHONIQUE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Société d'Etat de la République Française chargée d'apporter son assistance technique aux Etats Africains et Malgache dans le domaine de la radiodiffusion sonore et visuelle.

ORGANITEC PUBLICITÉ, PARIS

FRANCE-INTER "VARIETES"

	kc	m	kW		kc	m	kW
Paris III	584	514	1	Rouen	1403	214	20
Lyon I	602	498	100	Pau	1403	214	20
Marseille I	674	445	150	Bayonne I	1493	201	4
Rennes I	710	422	150	Nantes II	1493	201	0.05
Limoges I	791	379	150	Amiens	1484	202	0.05
Nancy I	836	359	150	Caen	1484	202	0.05
Toulouse I	944	318	150	Colmar	1484	202	0.05
Paris II	1070	280	100	Dijon	1484	202	1
Strasbourg I	1160	259	150	Poitiers	1484	202	1
Bordeaux I	1205	249	100	Ajaccio	1493	201	1
Lille I	1376	218	150	Reims	1493	201	0.05
Bastia	1403	214	8	Lorient	1594	188	0.05
Brest II	1403	214	20	Metz	1594	188	0.05
Clermont-Ferrand	1403	214	20	Mulhouse	1594	188	0.05
Montpellier I	1403	214	10	Angers	1594	188	0.05
Nice II	1403	214	20	St. Quentin	1594	188	0.05

FM: * 2kW, others 12kW.

Station	Mc		Mc		Mc
Toulouse*	87.9	Dijon*	93.7	Brest	97.8
Grenoble*	88.2	Paris	93.35	Troyes	97.9
Carcassonne	88.3	Mezieres*	93.5	Bordeaux*	98.1
Bourges	88.5	Rennes	93.55	Clermont Fd*	98.4
Le Mans	89.0	Gex*	94.4	Nantes	98.9
Limoges	89.5	Lille	94.7	Niort	99.4
Besancon*	90.0	Mulhouse	95.7	Caen	99.6
Vannes*	91.8	St. Raphael	96.3	Lyon	99.8
Aurillac*	91.9	Rouen	96.5	Metz	99.8
Marseille	91.27	Reims	96.8		

D.PRGR: 19.30–23.00 Inter Varietes; other times relay of France-Inter.

FRANCE CULTURE

	kc	m	kW		kc	m	kW
Bayonne II	539	557	0.05	Strasbourg	1277	235	100
Paris I	863	348	150	Bordeaux II	1349	222	20
Brest I	1241	242	20	Grenoble I	1349	222	20
Lille II	1241	242	20	Limoges II	1349	222	20
Lyon II	1241	242	20	Nantes I	1349	222	10
Marseille II	1241	242	20	Toulouse II	1349	222	20
Nancy II	1242	242	20	Saint-Brieuc	1493	201	0.05
Nice III	1241	242	20	Besançon	1493	201	0.18
Rennes II	1241	242	24				

FM: * 2kW, others 12kW. Bayonne 0.05kW.

Station	Mc		Mc		Mc
Aurillac*	98	Gex*	89.6	Niort	96.4
Bayonne	91	Grenoble*	99.4	Paris	97.6
Besancon*	97.7	Le Mans	97.0	Reims	98.85
Bordeaux*	98.7	Lille	98.0	Rennes	98.3
Bourges	94.9	Limoges	93.0	Rouen	94.0
Brest	89.4	Lyon	88.8	St. Raphael	88.7
Caen	91.53	Marseille	99.0	Strasbourg	87.72
Cannes*	88.7	Metz	94.5	Troyes	95.3
Carcassonne	96.5	Merzieres*	95.8	Toulouse*	95.7
Clermont Fd*	90.4	Mulhouse	88.6	Vannes*	88.6
Dijon*	99.2	Nantes	88.6		

D.PRGR: 05.58–23.00. **N:** 06.30, 11.30, 18.30.

FRANCE-MUSIQUE * 2kW, ** 0.25kW, others 12kW.

Station	Mc		Mc		Mc
Lille	88.7	Mulhouse	91.6	Strasbourg*	95.0
Reims	89.2	Grenoble*	91.8	Clermont Fd*	95.5
Metz	89.7	Bourges	91.8	Caen	95.6
Rennes	89.9	Rouen	92.0	Dijon*	95.9
Mezieres*	90.1	Lyon	92.4	Vannes*	96.0
Toulouse**	90.3	Le Mans	92.6	Nantes	90.6
Carcassone	90.9	Besancon*	92.9	Gex*	96.7
Paris	90.35	Brest	93.0	Nancy	96.9
Troyes	91.4	Bordeaux*	93.5	Toulon*	97.1
Niort	91.1	Marseille	94.2	Limoges	97.5
Toulouse*	91.5	Aurillac*	94.5	St. Raphael*	99.6

D.PRGR: 05.58–23.00. **N:** 06.30, 11.30, 18.30.

SPECIAL BROADCASTS:
Paris IV (Romainville) 962kc 312.0m 10kW.

ANN: For RTF Inter Jeunesse, Inter Varietés, France Culture and France Musique at opening and close down "La Marseillaise" followed by "Ici Paris, Office de Radiodiffusion-Télévision-Française".

INT-SIG: France Culture

RTF Inter Jeunesse: Fanfare by G. Delerue.
RTF Inter Varietés: Ballade by G. Delerue.

FOREIGN SERVICE

Stations: 100kW.

kc	m	kc	m	kc	m	kc	m
944	318.0	7240	41.44	9755	30.76	15245	19.68
1277	235.0	7280	41.21	11845	25.33	17765	16.89
5955	50.38	9560	31.38	11885	25.24	17850	16.81
6145	48.82	9570	31.35	11920	25.17	21580	13.90
6175	48.58	9585	25.24	15160	19.79	21620	13.87
7160	41.90	9620	31.19				

EUROPEAN SERVICE

Bulgarian kc
19.00–19.45 7240, 9755

Czech/Slovak
19.00–20.00 5955

English
20.00–20.15* 6175

German
18.00–18.45(W) 1277
18.45–19.00*(W) 1277
18.40–19.30(Sun) 1277

Greek
12.15–12.45 15160, 15245

Hungarian
18.15–19.00 5955, 9570

Polish
10.00–11.00b 9560
17.30–18.00(W) 1376
19.00–20.00 6145, 7160, 9570

Portuguese kc
19.00–19.30 7280, 9620
20.15–20.30* 6175

Rumanian
18.15–19.00 7240, 9755

Russian
16.00–17.00 7160, 9620, 11885, 15160

Serbo-Croatian
19.00–19.45 6145, 7160

Spanish
20.30–20.45* 6175
22.00–23.00 944

Yiddish
21.15–21.35(W) 9620, 11845

* French lesson (W) b Mass, Sun only.

OVERSEAS SERVICE

I=French Polynesia, New Caledonia, New Hebrides; II=Africa; III=Antarctica; IV=Antilles, Guiana, St. Pierre et Miquelon; V=Far East; VI=Indian Ocean; VII=Middle East; VIII=Canada; IX=Latin America – All prgr's in French exc. where indicated.

Time	Area	kc	Time	Area	kc
06.30–07.00(Mon)	III	7160, 9755	16.15–17.00	VI	17765, 21620
07.00–07.45	I	6175, 9755	17.30–17.45**	VIII	15130, 17850
08.00–08.30	II	17720, 21580	21.00–21.30	II	9620, 11885
11.30–12.00	IV	15245, 17765	23.00–23.30	II	602, 674
13.00–14.00[1]	V	15245, 17850, 21580	23.15–02.15[2]	IX	9755, 11845, 11920
15.45–16.00	VII	7240, 11845, 15245	00.30–02.00	IV	9560, 11885

*) English 13.00–13.30, French 13.30–14.00 (rel. by Brazzaville on 17720/21500kc) – [2])Portuguese 23.15–24.00, French 00.00–00.30, Spanish 00.30–02.15 (French lesson 00.30–00.45) – ** Fri 17.55.

PRGR'S in Arabic & Berber: Tr's 100kW:
16.00–17.30 Arabic on 7280/9585/11920kc, 17.30–20.30 Arabic on 7280/9585kc, 20.30–22.00 Kabyle on 7280/9585kc; (7280/9585kc directed to No. Africa, 11920kc to Middle East):

RELAYS OF FRENCH HOME SERVICES

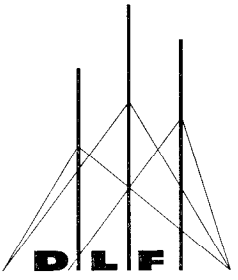
Times	kc	Programme
09.00–10.00(Sun)	7160	France Culture (Catholic Mass)
13.50–17.00(Sun)	21580	France Inter (Sport & Music)

ANN: "Allo... (name of area) Paris vous parle" – **V.** by QSL-eard.

O.C.O.R.A. (Office de Coopération Radiophonique).
an organization the purpose of which is improvement and development of Broadc. and Television in "les Etats Independants d'Afrique d'expression Francaise".

ADDR: 46, rue d'Amsterdam, Paris 9é. **Cable:** O.C.O.R.A. **Te:** PIGallé 99-39 – **L.P:** Pres of the Board of Adm: M. Bordaz. Dir. Gen: M.R. Pontillon. Secr. Gen: M.J. Lansier.

STATIONS: R. Bujumbura (Burundi), R.diff. de Cameroun (Yaoundé, Doùala, Garoua), R. Bangui (Bangui), R. Congo (Brazzaville), R.diff. Congolaise (Leopoldville), R. Abidjan (Abidjan), R.diff. du Dahomey (Cotonou), R. Gabon (Libréville), R. Haute Volta (Ouagadougou), R.diff. Nationale Malgache (Tananarive), R. Mali (Bamako), R. Mauritania (Nouakchott), R. Niger (Niamey), R. Rwanda (Kigali), R.diff. du Senegal (Dakar), R.diff. Nationale Tchadienne (Fort Lamy), R. diff. du Togo (Lomé).
AKG, Austria, delivered studio equip. (recorders, microphones).



DEUTSCHLANDFUNK

GEMEINNÜTZIGE ANSTALT DES ÖFFENTLICHEN RECHTS

Cologne-Marienburg, Lindenallee 7, Telephone 38 01 61

Medium Wave	**1538 kc/s**	**195,0 m**	**300 kW**
Medium Wave	**755 kc/s**	**397,0 m**	**20 kW**
Medium Wave	**548 kc/s**	**547,0 m**	**200 kW**
Long Wave	**151 kc/s**	**1986,8 m**	**50 kW**

PROGRAMME SCHEDULE

GMT	
03.58	Chorale
04.00	News
04.05	Commentary
04.10	Music
04.30	News
04.35	Music
05.00	News
05.05	Commentary
05.10	Religious Service
05.15	Music
05.30	News
05.35	Music
06.00	News
06.05	German press review
06.15	Music
07.00	News
07.10	Music
08.00	News
08.05	German press review
08.15	Music
09.00	News
09.05	Programme preview

GMT	
09.10	Education
09.30	Music
10.00	News
10.05	Music
10.50	Agricultural Report
11.00	News
11.05	Music
12.00	News
12.10	Commentary
12.15	Music
13.00	News
13.05	Music
14.00	News
14.05	Literature
15.00	News
15.10	Music
16.00	News
16.05	Programme preview
16.10	Music
16.30	Education
16.50	International press review
17.00	News
17.05	Economic Report

GMT	
17.15	Music
18.00	News, Reports from Germany
18.30	News
18.45	Political commentary
19.00	Evening programme
20.30	News
20.40	a) Foreign reports (Monday, Wednesday, Thursday, Saturday) b) Cultural Commentary (Sunday, Tuesday, Friday)
21.00	a) Music, resp. b) Scientific reports
21.30	Music
22.00	News
22.05	Programme preview
22.10	Music
23.00	News
23.05	Commentary
23.10	Music
00.00	News
00.05	Poetry
00.15	Music and informations News: 01.00, 02.00, 03.00
03.45	Station identification

In foreign languages on 1538 kc / 195 m:

19.00–19.30	Polish	20.30–21.00	Roumanian
19.30–20.00	Czechoslovakian	21.00–21.30	Hungarian
20.00–20.30	Serbian–Croation	21.30–22.10	French

Saturdays, Sundays, and Holidays also:

Service, church, morning ceremony, political reports, interviews, sport broadcasts.

AMERICAN FORCES NETWORK EUROPE

ADDR. & L.P: See Germany – **STATIONS:** Bel Manoir 98.4, Bordeaux 92.5, Braconne 89.2, Brienne-le-Chateau 94.2, Captieux 92.8, Chalons S/Marne 96.3, Chambley 95.2, Chateauroux 90.8, Chaumont 97.4, Chinon 93.4, Croix Chapeau 93.8, Dreux 99.05, Etain 99.0, Evreux 88.4, Fontainebleau 98.1, Ingrandes 99.2, Laon 88.4, *Orleans 90.3, Phalsbourg 91.7, *Potiers 97.2, St. Nazaire 99.8, Saumur 87.7, Toul Rosieres 93.35, St. Mihiel 91.7, Trois Fontaines 94.0, *Verdun 92.2, Vitry-le Francois 93.25Mc (*=Studios) – All st's: 0.05kW – **D.PRGR:** 05.00(Sun 06.00)–00.05 – See Germany.

GERMANY

GERMAN FEDERAL REPUBLIC

L.T: GMT+1 h – **Pr.L:** German.

ARBEITSGEMEINSCHAFT DER ÖFFENTLICH-RECHTLICHEN RUNDFUNKANSTALTEN DER BUNDESREPUBLIK DEUTSCHLAND (ARD)

Broadcasting:
Administration for Broadc. and Television: Intendant W. Hess, Hessischer Rundfunk, 6 Frankfurt/Main Bertramstrasse 8 – **Members:** Bayerischer, Hessischer, Norddeutscher, Saarländischer, Süddeutscher und Westdeutscher Rundfunk, Radio Bremen, Sender Freies Berlin, Südwestfunk, Deutschlandfunk, Deutsche Welle, and as guest-partaker at meetings: RIAS Berlin.

Fernseh Koordinationsbüro: Staatssekretär a. D. Dr. K. Mohr, München 23, Leopoldstr. 10.

Fernsehbeirat: Chmn: H. Müller, 3406 Bovenden/Göttingen, Erlenweg 2.

Institut für Rundfunktechnik: Floriansmühlstr. 60. München-Freimann.

Television: Arbeitsgemeinschaft der Öffentlich-Rechtlichen Rundfunkanstalten der Bundesrepublik (ARD): See radio.

DEUTSCHLANDFUNK (Gemeinnützige Anstalt des öffentlichen Rechts)

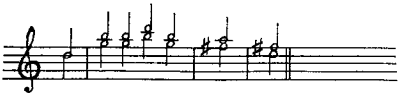
Purpose: Veranstaltung von Rundfunksendungen für Deutschland und das europäische Ausland, die ein umfassendes Bild Deutschlands vermitteln.

ADDR: Köln-Marienburg, Lindenalle 7. Te: 380161.

L.P: Intendant: Dr. H. F. G. Starke. Dir. Aktuelles Programm: J. Viehöver. Dir. Kulturelles Program: Dr. J. Petersen. Sendeleiter: E. Imelmann. Verwaltungsdirector & Justitiar: Freiherr von Sell. Chief Engineer: O. Scheffler.

STATIONS	kc	m	kW		kc	m	kW
Mainflingen	151	1986.8	50	Ravensburg	755	397	20
Königslutter	548	547	200	Mainflingen	1538	195	300

HOME SCE. in German: 03.58–03.45.
N: Every h on the h 04.00–17.00 & 22.00–03.00, also at 04.30, 05.30, 18.30, 20.30.
"Deutschland Echo": W 18.00 – **"Die Woche in Deutschland":** Sat 18.45 – **"Themen des Tages":** Mon–Fri 18.45 – **"Prisma der Welt":** Mon, Wed, Thurs, Sat 20.40 – **"Wirtschaftsfunk":** Mon–Fri 17.05. Further details see advertisement on page 105.
FOREIGN SCE. on 1538kc: W 19.00–22.10.
19.00 Polish, 19.30 Czech, 20.00 Serbian/Croatian, 20.30 Roumanian, 21.00 Hungarian, 21.30 French.
ANN: "Hier ist der Deutschlandfunk" – **INT-SIG:** "Du Land voll Lieb' und Leben" from the folksong "Ich hab' mich ergeben" (played on Celeste).



Wilhelm Franz KG, Germany: EMT studio equip.
Telefunken AG, Germany, delivered studio equip. (recorders).

DEUTSCHE WELLE (Anstalt des öffentlichen Rechts)

ADDR: Bruederstr. 1, Postfach 344, 5 Köln. Te: 20301. **Telex:** 08/881942 – **L.P:** Intendant: Dr. Hans Otto Wesemann. Dir. Adm: Dr. H. Fellhauer. Dir. Tec: G. Roessler. DX-Editor: G. G. Thiele.
STATIONS: Juelich-DMQ, 7 tr. 100kW – Kigali/Rwanda rel. 1 tr. 0.6kW (to be increased to 250kW) rebroadc. all tr's to Africa on 7225kc. From 08.50–09.50 only on Sun Kinyarwanda on 7225kc.

kc	m	kc	m	kc	m	kc	m
5980	50.17	7255	41.35	9675	31.01	11965	25.07
6015	49.88	7275	41.24	9685	30.98	15205	19.73
6075	49.38	7280	41.21	9735	30.82	15275	19.64
6100	49.18	9530	31.48	11785	25.46	15280	19.63
6145	48.82	9545	31.43	11795	25.43	15405	19.47
6160	48.70	9575	31.33	11890	25.23	17845	16.81
7125	42.11	9605	31.23	11925	25.16	17870	16.79
7150	41.96	9610	31.22	11930	25.15	21650	13.86
7205	41.64	9640	31.12				

Relay-st. Kigali: 7225kc 41.52m.

OVERSEAS SERVICE

Abbreviations: I=Ea.Asia, Australia, New Zealand; II=Japan; III=So.Asia; IV=No. and M.Ea; V=Africa; VI=So.America; VII=No.America (East); VIII=C.America; IX=No.America (West); X=East Europe; XI=So.Europe.

GERMAN PRGR:

H of tr.	Area	Nov 64-Feb 65 kc	N.
06.45–09.45	I	9735/11795/15205	06.45, 09.35
09.45–12.45	II	9735/11795	09.45, 12.35
12.50–15.50	III	9735/11965	12.50, 15.40
16.00–19.00	IV	7125/9545	16.00, 18.50
17.15–20.15	V	9530/11785	17.15, 20.05
19.05–22.05	V	9605/11925	19.05, 21.55
22.30–01.30	VI	6145/9575/9735	22.30, 01.20
00.00–03.00	VII	6075/6100/9545	00.00, 02.50
01.45–04.45	VIII	6145/9605	01.45, 04.35
03.00–06.00	IX	6075/6100/9640	03.00, 05.50

Comm: After first N, – **"Wie wir leben"** Wed. – **"Unter uns gesagt":** Wed, – **DX Prgr:** 2nd Tues/Wed of month of 08.00, 11.00, 14.05, 17.15, 18.30, 20.20, 23.45, 01.15, 03.00, 04.15. – **"Technische Hinweise"** (Technical Hints in German): every 4th Mon/Tues at times as for DX prgr.

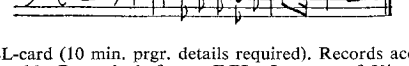
FOREIGN LANGUAGE PRGR:

H of tr.	Area	Nov–Feb kc	L.	N.
01.35–02.15	VII	6160/9640	**English**	01.37
02.15–02.55	VII	6160/9640	**French**	02.17
04.55–05.35	IX	6145/6160 9575/9735	**English**	04.57
05.40–06.40	VI/VIII	6145/9735	Spanish	05.42
06.05–06.35	V	9605/11785/15275	**English**	06.07
06.35–06.50	V	9605/11785/15275	Hausa	06.37
06.50–07.25	V	9605/11785	**French**	06.52
06.10–06.40	IV	7280/9675	Turkish	06.12
07.30–08.40	III	11785/15275/17845	**English**	07.32, 08.02
08.45–09.40	I	11925/15275/17845	**English**	08.47
09.50–10.40	IV	17845/21650	Persian	09.52
09.55–10.55	V	11930/15280/17870	Swahili	09.57
11.00–12.00	IV/V	15275/17845	Arabic	11.02
11.05–12.05	X	6145/7205/9640	Czech/Slovak	11.07
12.10–12.40	X	7205/9545/11965	Rumanian	12.12
12.20–13.20	X	9640/11890	Bulgarian	12.52
12.45–13.25	I	9685/11795/15405	Indonesian	12.47
13.30–14.30	X	6145/7205	Polish	13.32
13.30–14.30	X	6075/7275/9640	Hungarian	13.32
14.35–15.05	X	9545/11925/15405	Russian	14.37
14.40–15.40	X	6075/7275	*Serbo/Croat	14.42
15.10–15.50	IX	9545/9640/11795	**English**	15.12
15.50–16.20	III	7150/9735	**English**	15.52
15.55–16.15	V	9610/11890/15275	Swahili	15.57
16.15–17.10	V	9610/11890/15275	**English**	16.17
16.25–17.20	IV	7150/9640	Persian	16.27
17.25–17.55	IV	6075/7150/9640	Turkish	17.27
18.00–19.00	X	6015/6075/7255	Russian	18.02
19.10–20.10	IV	5980/7255	Arabic	19.12
19.35–20.15	XI	6075	Spanish	19.37
20.20–21.00	XI	6075	Portuguese	20.22
20.20–20.50	V	7255/9575	**English**	20.22
20.50–21.50	V	7255/9575	**French**	21.12
21.05–21.45	XI	6075	Greek	21.00
21.10–22.00	I	5980/7275	**English**	21.12
21.55–22.35	XI	6075	Italian	22.00
22.10–23.00	VI	6160/9545/11795	Portuguese	22.12
23.00–23.50	VI/VIII	6160/9545/11795	Spanish	23.02

* 15.20–15.40 Tues, Thurs: Slovenian.

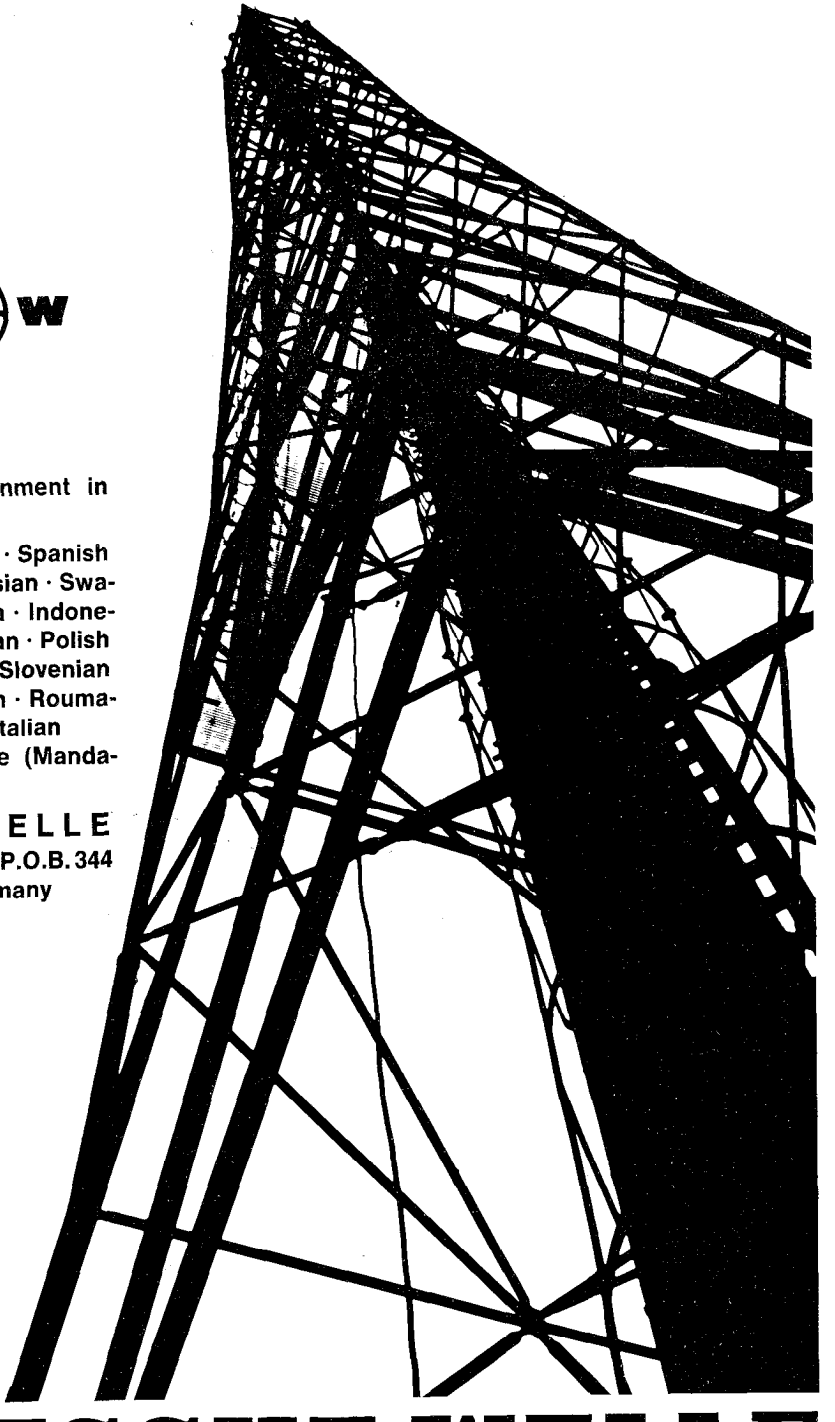
Tentative schedule (March/April 1965): see last minute information.

ANN: G: "Hier ist die Deutsche Welle". E: "This is R. Deutsche Welle, the Voice of Germany". F: "Ici la Voix de l'Allemagne". Sp: "Habla la Voz de Alemania". P: "Esta é a Voz de Alemanha".
INT-SIG: Motif from "Fidelio" by Beethoven: "Es sucht der Bruder seine Brüder" played on Celeste.



V. by QSL-card (10 min. prgr. details required). Records accepted – **PUB:** Monthly Prgr.sched. free – **F.PL:** Increase of Kigali tr. to 250kW.

Telefunken AG, Germany, delivered: 100kW sw-tr's, studio equip. (recorders). Marconi Co, G.B: transmitter (Kigali). Brown Boveri, Switzerland: Antennas (Kigali). Wilhelm Franz KG, Germany: EMT studio equip.



Information and entertainment in 26 languages:

German · English · French · Spanish Portuguese · Arabic · Persian · Swahili · Hausa · Kinyarwanda · Indonesian · Hindi · Urdu · Russian · Polish Hungarian · Serbo/Croat · Slovenian Czech · Slovak · Bulgarian · Roumanian · Turkish · Greek · Italian
A programme in Chinese (Mandarin) is being prepared.

DEUTSCHE WELLE
5 Cologne · Brüderstr. 1 · P.O.B. 344
Federal Republic of Germany

DEUTSCHE WELLE

DER BAYERISCHE RUNDFUNK (Anstalt des öffentlichen Rechts)
AD: Mon–Fri: 05.25–06.00, 08.20–09.00, 12.45–13.30. Sat: 05.25–06.00, 06.45–07.00 – **ADDR:** 8 München 2, Rundfunkplatz 1. **Cable:** Bayernfunk München. **Te:** 59001 – **L.P:** Intendant: Chr. Wallenreiter. Prgr. Dir: W. von Cube. Adm: H. Spies. Dir. Tec: Dr. F. Daser.

HOME SERVICE

FIRST PRGR. on all frequencies: W 04.30(Sat, Sun 05.00)–24.00 (exc. 08.55–09.35 m.w. only). * night only. [1] Passau. [2] Augsburg, Landshut.

M.waves:	kc	m	kW		kc	m	kW
Bayreuth	520	577	0.2	Hof	1602	187	1
Kempten	520	577	0.2	Land./Isar	1602	187	20*
Würzburg	520	577	0.2	Kirchheim	1602	187	20*
low power[1]	520	577	0.2*	Coburg	1602	187	1
München	800	375	100	Regensburg	1602	187	1*
2 low power[2]	1484	202	1.0*				
Nürnberg	1602	187	20 day, 40 night.				

Short Wave: München-Ismaning DMR24 6085kc 49.30m 10kW.

FM:	ch	Mc	kW		ch	Mc	kW
Berchtesgaden	3	87.8	0.3	Wendelstein 1	22	93.7	100
Lindau I	4	88.1	0.4	Bamberg I	26	94.8	6
Herzogstand I	4	88.1	0.1	Aschaffenburg I	29	95.6	17
Dillberg I	6	88.9	12	Ochsenkopf/ Fichtelgeb. I	30	96.0	100
München I	14	91.3	3				
Hühn. b. Hb.	16	91.9	6	Hoher Bogen	33	96.8	30
Bad Reichenh.	19	92.8	0.3	Traunstein Hb.	37	98.0	2
				Kreuzb./Rhön I	38	98.3	10

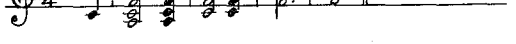
N. Wrp: W 05.00, 06.00, 07.00, 08.00, 11.00, 12.00, 16.00, 18.00, 20.00, 22.00, 23.00; Sun 06.00, 07.00, 08.00, 12.00, 18.00, 20.00, 22.00, 23.00 – **"Chronik des Tages":** W 17.00 – **Request Prgr:** Wed. 18.15 – **Italian** (for Italian workers in Germany): Sat 08.07–08.35.
Night Prgr: D 00.00–04.20 on 520kc (Bayreuth, Kempten, Würzburg), 1602kc (Nürnberg, Kirchheim, Landau/Isar, Hof, Coburg) and on all FM st's exc. 96.0Mc – **N:** *00.00, 01.00, 02.00, 03.00, 04.00* – **Request Prgr:** Sun 13.30 (fortnightly), Wed 19.15 – **T.S:** 11.00, 17.00, 23.00 – **N. in English, French, German:** 08.00. **Italian:** Sat 08.05–08.35 (for *Italian Workers in Germany*).

SECOND PRGR: Mon–Fri: 04.30–08.50, 09.30–24.00. Sat, Sun: 05.00–24.00 – **Relay First Prgr:** 04.30–05.05, 06.00–07.15, Mon–Fri: 11.05–12.00, Wed, Fri, Sat: 23.00–24.00, Sun: 05.00–06.05, 23.00–24.00.

	ch;	Mc	kW		ch	Mc	kW
Gelbelsee	2	87.6	10	Hohenpeissenb.	10	89.9	8
Tegernseer Tal	2	87.7	0.3	Landshut	11	90.2	0.1
Augsburg	3	87.9	0.75	Ochsenkopf/ Fichtelgeb.II	12	90.7	100
Büttelb./Frankh.	4	88.2	7				
Coburg	4	88.3	2	Brotjacklriegel	17	92.1	100
München II	5	88.4	3	Lindau	17	92.9	0.4
Grünten/Allgäu	6	88.7	100	Dillberg II	18	92.3	12
Würzburg	7	89.0	2	Hohe Linie	20	93.0	8
Garm.-Partenk.	7	89.2	0.5	Kreuzb./Rhön II	20	93.1	100
Wendelstein II	8	89.5	100	Passau	21	93.2	0.3
Bamberg II	9	89.6	6	Hoher Bogen II	25	94.4	2
Aschaffenb. II	9	89.75	6	Herzogstand II	33	97.0	0.1

N: W: 06.00, 07.00, 11.00, 16.00, 18.00, 20.00, 22.00. Sun: 06.00, 11.05, 19.00, 21.00, 23.00.

THIRD PRGR: D 17.30–20.30 for Turkish, Italian, Spanish and Greek workers: N, commentaries:
FM: München ch 34 97.3Mc – Dillberg ch 36 97.9Mc.
17.30 Turkish, 18.15 Italian, 19.00 Spanish, 19.45 Greek.
ANN: "Hier ist der Bayerische Rundfunk". **E:** This is der Bayerische Rundfunk" – **V.** by QSL-card or letter. Prgr.sched. on request.
INT-SIG:

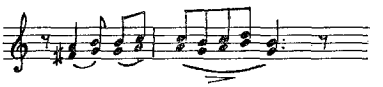


PUB: "Pressedienst" (weekly).

Telefunken AG' Germany, delivered four 20kW mw-tr's (Ismaning, Schwaben, Landau, Kirchheim), one 5kW tr (Nürnberg); FM-tr's: Landshut (0.1kW), Passau (0.25kW), Coburg (1kW), Würzburg (1kW), Hoher Bogen (3kW), Lindau (0.25kW), Hohe Linie (3kW), Hohenpeissenberg (3kW), Brotjacklriegel (10kW), Hühnerberg (2kW), Büttelberg (2kW), Lindau (0.3kW), studio equip. (recorders).
Kathrein Antennen, Germany, delivered FM-antennas.
Wilhelm Franz KG, Germany: EMT studio equipment.

RADIO BREMEN (Anstalt des öffentlichen Rechts)
AD: Mon–Fri: 06.05–06.30, 12.10–13.00, 17.30–18.00. Sat 17.30–17.50. **ADDR:** Heinrich-Hertz-Str. 13, Bremen. **Cable:** Radio. **Te:** 444041. **L.P:** Intendant: H. Kerneck. Dir. Prgr. and TV: H. Abich. Dir. Tec: H. Heyer.

HOME SCE: First Prgr: W: 05.00–23.05. Sun: 06.00–23.05.
Bremen 1358kc 221m 20kW – Bremerhaven 1079kc 278m 2kW – 6190kc 48.47m 10kW.
FM: Bremen I ch23 93.8Mc 100kW – Bremerhaven I ch8 89.5Mc 0.5kW.
Second Prgr: W: 17.00–23.05. Sat: 15.00–23.05. Sun: 09.00–23.05 exc. 12.00–15.00.
Bremen II ch4 88.3Mc 100kW – Bremerhaven II ch17 92.1MHz 5kW.
N, Wrp, Comm: (1st & 2nd Prgr.) 05.05(W), 05.30(W), 06.00(W), 06.30(W), 07.00, 07.30(W), 12.00, 16.00(exc. Sat & Sun), 16.00, 18.00, 18.30, 20.00, 21.00, 22.00(exc. Sat), 23.00 – **"Die Zeit im Funk":** W 18.00–18.30 – **Rel:** 05.00, W: 07.35, Sun: 06.00, 09.00, Sat: 17.00 – **L.L: English:** Tues 14.45, Wed: 08.45, 14.30, Thurs: 08.30(fortnightly), 14.40, Fri 08.40 – **Mbg:** Sun 17.00.
ANN: "Hier ist R. Bremen mit dem ersten, bzw. zweiten Programm".
INT-SIG: *Mass in H minor* by Bach.



V. by QSL-card. Rp. Re. in E, F or G – **PUB:** Prgr.sched. free on request to Pressestelle, Radio Bremen.

Telefunken A.G, Germany, delivered 20kW mw-tr. (Bremen), FM tr's: Bremen (0.3 and 3kW), studio equip. (recorders).
Wilhelm Franz KG, Germany, delivered EMT studio equipment.

HESSISCHER RUNDFUNK (Anstalt des öffentlichen Rechts)
I = Prgr. I; II = Prgr. II; III = Prgr. III – **AD:** W 07.15–08.00(I+II), 09.10–09.30(II), 10.10–10.30(I), 11.10–12.00(II), 12.10–13.00(I).
ADDR: 6000 Frankfurt (Main) 1, Postfach 3294, Bertramstr. 8. **Cable:** Hessfunk. **Te:** 59051. **Telex:** 04 11127.
L.P: Intendant: W. Hess. Personal Adviser: Dr. H. Prescher. Dir. Adm: Dipl-Kfm: H. Weber. Dir. of Staff: W. Heckroth. Chief Legal Adviser: W. Lehr. Press: R. Weigand. Publ. Rel. Dr. J. Bengsch. Dir. Prgr (Radio): Dr. H. Wicht. Dir. Prgr (TV): H. Otto Grünefeldt. Dir. Tec: Dr.-Ing. F. Miseré. Politic & N: Chief Editor O. Herr. Culture: Dr. A. Frisé. Educ: Dr. G. Kadelbach. Music: Dr. H. W. Kulenkampff. Entertainment: W. Jaspert.

STATIONS: Prgr. I
Frankfurt 593kc 505.8m 100kWd – Meissner 593kc 505.8m 20kWd.

FM:	ch	Mc	kW		ch	Mc	kW
Biedenkopf	2	87.6	10	Hardberg	19	92.7	0.25
Feldberg	8	89.4	10	Meissner	8	89.4	10
Würzburg	4	88.2	0.25	Rimberg	14	91.25	3
Prgr. II	**ch**	**Mc**	**kW**		**ch**	**Mc**	**kW**
Hardberg	12	90.6	0.25	Biedenkopf	42	99.6	10
Meissner	28	95.4	10	Feldberg	32	96.6	10
Würzburg	35	97.5	0.25	Rimberg	27	95.0	3
Prgr. III	**ch**	**Mc**	**kW**		**ch**	**Mc**	**kW**
Feldberg	25	94.4	10	Meissner	40	99.0	0.8

HOME SCE: Two prgr's day and night. The night prgr. at 23.10–05.00 only 593kc (Frankfurt or Meissner) – **N.** every h on the h – **Wrp:** after **N** – **Comm:** *D 18.10(I), 19.10(II)* – **L.L:** *English:* Sat *08.35(II)*, Spanish: Sat 08.50(II), 09.50(II).

Third Prgr: W 17.00–21.00 for Italian, Turkish, Spanish and Greek Workers in the Fed. Rep – **Quiz:** Thurs 19.30(I) (fortnightly) London-Frankfurt – **ANN:** "Hier ist der Hessische Rundfunk" or "Hier ist Frankfurt" – **INT-SIG:** Electronic music – **V.** by QSL-card – **PUB:** Prgr.schedule, press releases (half yearly, yearly and weekly).

NORDDEUTSCHER RUNDFUNK
(Anstalt des öffentlichen Rechts)

FI: By license payments – **ADDR:** Hamburg 13, Rothenbaumchaussee 132/34. **Cable:** Nordfunk. **Te:** 441931. **Studios: Flensburg:** Friedrich-Ebert-Str. 1 – **Oldenburg:** Oldenburg i.O. Jägerstr. 30 – **Berlin:** Berlin-Grünewald, Hubertusallee 26 – **Kiel:** Hamburger Chaussee 349. **L.P:** Intendant: G. Schröder. Finanzdir: G. Schulz. Dir. Tec: Dr. H. Rindfleisch.

HOME SERVICE

FIRST PRGR: *D 03.55(Sun 04.58)–00.15(Sat 01.15).* ***Night Prgr.*** *on* 520kc (Braunschweig), 701kc (Hamburg), 1570kc (Flensburg), 1586kc (Hannover, Oldenburg), Hamburg 92.1Mc, Harz 96Mc: Sun, Mo, Fri 00.15–03.30. Sat 01.15–04.30.

	kc	m	kW		kc	m	kW
Braunschweig	520	577	2	Flensburg	1570	191	10
Aurich	701	428	2	Hannover	1586	189	20
Lingen	701	428	2	Kiel	1586	189	5
Göttingen	971	309	5	Oldenburg	1586	189	40
Hamburg	971	309	100	Osnabrück	1586	189	5

FM Stations (relay m.w. prgr. exc. night prgr.)

	ch	Mc	kW		ch	Mc	kW
Götting.	5	88.55	1.2	Oldenb.	14	91.1	70
Bungsb.	10	89.9	4.5	Dannenb.	14	91.2	15
Harz	10	89.9	100	Kiel	14	91.3	1.2
Aurich	10	90.05	25	Osnabr.	18	92.4	0.5
Hambg.	11	90.3	80	Lingen	19	92.8	15
Heide	12	90.5	15	Lübeck	20	93.1	0.06
Hannov.	13	90.9	3	Flensbg.	21	93.2	15

N, Wrp: D: 04.00, 05.00(W), 06.00, 07.00(W), 07.55(Sun 08.00), 12.00, 16.00(exc. Sat), 18.00, 20.45, 23.00, 01.00, 02.00, 03.00 – **Rlg:** Sun 09.00, W 05.50.

SECOND PRGR: Mon–Fri: 05.00–12.30, 14.00–23.05. Sat: 05.00–23.05. Sun: 06.28–23.05.

	ch	Mc	kW		ch	Mc	kW
Flensbg.	9	89.6	15	Dannenb.	31	96.4	15
Lingen	11	90.2	15	Bungsbg.	36	97.8	4.5
Götting.	24	94.1	2	Harz	37	98.0	100
Oldenb.	25	94.4	70	Hannov.	39	98.7	3
Kiel	25	94.5	1.2	Osnabr.	39	98.8	2
Lübeck	29	95.7	0.06	Hambg.	41	99.2	80
Aurich	29	95.8	25	Heide	41	99.4	15

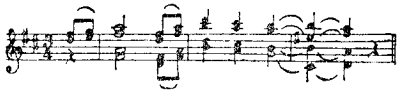
N: 06.30(W), 07.00(Sun), 07.30(W), 11.00(W), 18.55, 21.30.

THIRD PRGR. (1/10–31/5 only): **D:** 18.20–approx. 21.30. **N:** 19.00.

	ch	Mc	kW		ch	Mc	kW
Hambg.	2	87.6	80	Hannov.	30	95.9	5
Osnabr.	7	89.2	2	Flensb.	30	96.05	3
Lübeck	13	90.9	0.06	Götting.	30	96.1	1
Bungsb.	16	91.9	4.5	Lingen	36	97.8	1.25
Harz	17	92.1	100	Aurich	37	98.15	25
Dannenb.	21	93.3	1	Kiel	38	98.3	1.2
				Oldenb.	43	99.8	70

ANN: 1st Prgr: "Hier ist das Erste Programm des Norddeutschen Rundfunks" – 2nd Prgr: "Hier ist das Zweite Programm des Norddeutschen Rundfunks" – 3rd Prgr: "Hier ist das Dritte Programm des Norddeutschen Rundfunks und des Senders Freies Berlin".

INT-SIG: 1st Prgr: Motif from the first movement of Johs. Brahms' Symphony no. 2.



2nd Prgr: "Einen zerlegten Nonen-Akkord" – **3rd Prgr:** The tones "B-A-C-H" in Regerharmonization – **V.** by QSL-card – **PUB:** "Die Ansage" (weekly), Prgr.sched. (weekly).

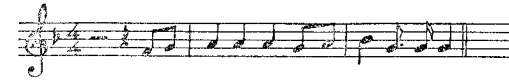
Telefunken A.G. Germany, delivered mw-tr's: Hannover (20kW). Kiel (5/2kW), Oldenburg (20/40kW); FM-tr's: Heide (0.25 and 3kW), Hamburg (2×0.3kW, 2×10kW), Hannover (0.25, 1 and 3kW); studio equip. (recorders).
Kathrein Antennen, Germany, delivered FM-antennas.
Wilhelm Franz KG, Germanz: EMT studio equip.

EUROPE NO. 1 (Comm.)

ADDR: Europäische Rundfunk und Fernseh AG, 6600 Saarbrücken 2, P.O. Box 301. **Te:** 2.41.62 – **L.P:** Mgr: F. Billmann.
For Programmes: Télécompagnie 26 bis, Rue Francois Ier, Paris 8e. **Cable:** Euradio. **Te:** Balzac 6500. **L.P:** Pres: S. Floirat. Gen. Mgr: M. Siegel – **For Advertisements:** Regie No. 1, 28, Rue Francois Ier, Paris 8e. **L.P:** Gen. Mgr: J. Frydmann.
STATION (System CFTH): Felsberg 182kc 1647m 400/1000kW, **HOME SCE. in French:** 05.00(Sun 05.30)–24.00. **N:** W every h on the h exc. 12.00, 19.00. Also 05.30; Sun 05.30, 07.00, 09.00, 10.00 11.00, 13.00, 16.00, 17.00, 21.00, 22.00, 23.00, 24.00.
ANN: F: "Ici Europe No. 1" – **V.** by QSL-card. **Re.** to Europe No. 1, 663 Saarlouis, P.O. Box 209, Germany.
Telefunken A.G. Germany delivered studio equip. (recorders).
A.K.G. Austria, delivered studio equip. (recorders, microphones).
Wilhelm Franz KG, Germany: EMT studio equip.

SAARLÄNDISCHER RUNDFUNK

(Gemeinnutzige Anstalt des öffentlichen Rechts)
AD: W 06.15–07.30, 10.00–11.00, 11.40–12.00, 12.25–12.30, 18.30–19.00, Mon–Fri 17.20–18.00, Sat 16.25–17.00 – **ADDR:** 60 Saarbrücken, Funkhaus Halberg. Postfach 1050. **Cable:** Radio Saarbrücken. **Te:** 6021 – **L.P:** Dir. Adm. Dep. Dir: W. Klein. Programm-Dir. mit der Koordination beauftragt: Dr. W. Zilius. Fernsehbeauftragter: Dr. E. Ringling. Techn. Dir: Dipl-Ing. F. Glasow.
STATIONS: 100kW: 1421kc 290m – **FM:** Göttelhorn: 88.0, 91.3, 95.5Mc.
HOME SCE. in German: M.W. Prgr: W 04.57–08.30, 10.00–00.05, Sun 05.30–00.05. **N, Wrp:** W 05.00, 06.00, 07.30, 12.00, 16.00, 18.30, 21.00, 23.00, 00.00, Sun 06.00, 07.00, 12.00, 18.30, 21.00, 23.00, 00.00.
FM Prgr: Mon–Fri 17.00–22.00, Sat 13.30–22.00, Sun 07.15–13.00, 14.00–21.00 – **N:** W 17.30, 21.30, Sun 12.00, 18.30, 21.00.
ANN: "Hier ist der Saarländische Rundfunk auf Wellenlänge 211 m bzw. auf Ultrakurzwellen 88.0, 91.3 und 95.5MHz".
INT-SIG: "Glück auf, der Steiger kommt".



V. by QSL-card – **PUB:** Prgr.schedule free on request.

Telefunken AG, Germany: delivered studio equip. (recorders).
Kathrein Antennen, Germany: FM-Antennas.
Wilhelm Franz KG, Germany: EMT studio equip.

SENDER FREIES BERLIN (Anstalt des öffentlichen Rechts)

AD: W 05.30–06.40, 10.00–11.15. From 16.30 – **ADDR:** Masuren Allee 8-14, 1 Berlin 19. **Cable:** Sender Freies Berlin. **Te:** 92031 – **L.P:** Vorsitzender d. Rundfunkrates: Dr. F. Suchan. Intendant: W. Steigner. Dir. Prgr: H. H. Fischer. Dir. Tec: U. Blässer. Dir. Adm: H. Koch.

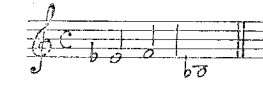
HOME SCE
Berlin 1st Prgr. 566 kc 530 m 20 kW – **FM:** 88.75 Mc 10 kW
Berlin 2nd Prgr. 1484 – 202 – 5 – – FM 92.4 – 10 –
Berlin 3rd Prgr. FM: 96.3 Mc 10 kW.

1st Prgr: Mo–Fri 03.58–03.30, Sat 03.58–04.30, Sun 04.58–03.30 **N:** 04.00(W), 05.00(W), 06.00, 07.00(W), 08.00(Sun), 09.00(W), 10.00(W), 12.00, 14.00(W), 16.00, 18.00, 18.45, 21.00, 23.00.
European Request Prgr: Every 4th Tues 00.15–02.00 (29/12, 26/1 etc.)

2nd Prgr: Mon–Fri 15.00–23.00, Sat 07.20–23.00, Sun 06.58–23.00 – **N:** W as 1st prgr. 04.00–16.00, 18.15, 22.00, Sun 07.00, 13.00, 16.00, 18.15, 22.00. **"Kurzwellenbummel"** (a prgr. for sw-friends compiled and produced by W. Uthoff): Every 4th Sat 21.25–21.40 (2/1, 30/1 etc.)

3rd Prgr: 18.20–approx. 22.30.

ANN: "Hier ist der Sender Freies Berlin mit dem ersten Prgr... zweiten Prgr" – **INT-SIG:** Cembalo:



V. by QSL-card – **F.PL:** 100kW mw-tr. 1st Prgr. (566kc) – **PUB:** "Vorschau" (weekly).

Telefunken AG, Germany: delivered mw-tr's: 2×5kW, 1×100kW. FM-tr's: 1×0.3kW, 1×3kW; studio equip. (recorders).

SÜDDEUTSCHER RUNDFUNK

(Anstalt des öffentlichen Rechts)
AD: W: 06.05–06.55, 12.00–13.15 – **ADDR:** 7000 Stuttgart-1 P.O. Box 837. **Cable:** Rundfunk, Stuttgart. **Te:** 299701. **Telex:** 0723456.
Studios: Heidelberg-Mannheim: Heidelberg, Marstallstr. 6. Karlsruhe: Kriegsstr. 168 – **L.P:** Vorsitzender des Rundfunkrats: Dr. Valentin Gaa, Landrat, Mannheim. Vorsitzender des Verwaltungsrats: Dr. rer. nat. h. c. Dr. ing. e. h. Alex Möller, Generaldir. (MdB), Karlsruhe. Intendant: Dr. Hans Bausch. Programmdir: Dr. Peter Kehm. Verwaltungsdir: Friedrich Müller. Technischer Dir: Dr. Helmut Rupp. Dir. TV: Horst Jaedicke.

HOME SERVICE:
M.W. Prgr. (rel. by S.W. and FM): Sun 04.56–00.10, Mon 03.56–03.30, Tues, Thurs 03.56–23.15, Wed 03.56–03.55, Fri 03.56–03.30, Sat 03.56–24.00. Break in transmission: Mon–Fri 13.15–14.00 exc. for Mühlacker on 575kc.

Stations	kc	m	kW		kc	m	kW
Mühlacker	575	522	300	Schwäbisch-Hall	1484	202	0.2
Heidelberg				Eberbach	1484	202	0.2
Dossh.	998	301	10	Mosbach	1484	202	0.2
Buchen Walldürn	998	301	0.2	Bopfingen	1484	202	0.2
Ulm. Jungingen	1169	257	5	Ellwangen	1484	202	0.2
Heilbronn-				Adelsheim	1484	202	0.2
Obereisesh.	1169	257	10	Gerabronn	1484	202	0.2
Bad Mergenth.	1412	212	3	Giengen	1484	202	0.2
Wertheim	1484	202	0.2	Kirchberg	1484	202	0.2
Heidenheim	1484	202	0.2	Külsheim	1484	202	0.2
Crailsheim	1484	202	0.2	Neresheim	1484	202	0.2

Short Wave: Mühlacker: 6030kc 49.75m 20kW.

FM:	ch	Mc	kW		ch	Mc	kW
Stuttgart I	26	94.7	100	Aalen I	27	95.1	50
Waldenburg I	39	98.8	100	Geislingen I	28	95.5	0.5
Heidelberg I	36	97.8	100	Ulm I	25	94.5	1

N: 04.30, 05.00, 06.00, 07.00, 08.00, 11.30, 16.00, 17.00, 18.00, 21.00, 23.00.

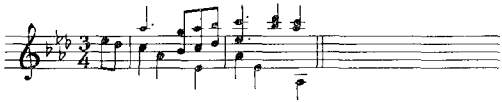
FM: 2nd Prgr: W: 04.35–09.15, 09.45–23.15. Sat: 04.35–24.00. Sun: 07.05–23.10.

	ch	Mc	kW		ch	Mc	kW
Stuttgart II	10	90.1	100	Stuttgart (Stadt) II	3	88.0	0.5
Waldenburg II	23	93.8	100	Heidelberg II	6	88.8	100
Aalen II	14	91.1	50	Mühlacker	8	89.5	4.5
B. Mergenth. IIA	3	87.8	0.5	B. Mergenth. IIB	21	93.2	0.5
Geislingen II	20	93.0	0.5	Wertheim	16	91.8	0.1
Ulm II	7	89.2	1.0	Buchen	16	91.9	0.1

N: 05.30, 06.30, 07.30, 12.00, 13.00, 16.30, 17.30, 18.30, 21.30, 23.00.
FM (3rd Prgr): **For Foreign Workers:**

	ch	Mc		ch	Mc
Stuttgart	17	92.2	Heidelberg III	43	99.9
Aalen III	37	98.1	Ulm III	35	97.4

Italian: D exc. Wed 18.45, Wed 18.30 – **Spanish:** Tues, Fri 18.15 – **Greek:** Tues, Fri 18.30 – **Turkish:** Mon, Thurs 18.30.
ANN: "Hier ist der Süddeutsche Rundfunk" – **INT-SIG:** The first notes of a Swabian folksong: "Jetzt gang i ans Brünnele"



V. by QSL-card.

Telefunken AG, Germany: delivered mw-tr's: 1 × 5kW (Ulm), 1 × 100 kW (*Mühlacker*), FM-tr's: 2 × 0.3kW (*Ulm, Geislingen*), 2 × 3kW (Aalen), studio equipment (recorders).
Kathrein Antennen, Germany: FM-Antennas.
Wilhelm Franz KG, Germany, delivered EMT Studio equipment.

SÜDWESTFUNK (Anstalt des öffentlichen Rechts)

AD: M.w: Mon, Tues, Thurs, Fri: 09.00–15.05, Wed 09.30–10.55, Sat 12.30–13.20, 17.10–17.30 – **FM:** W 06.10–06.40, Mon–Fri 07.05–09.00, 17.10–17.40, Sat 07.05–08.30.
ADDR: Anstalt des öffentlichen Rechts, Hans Bredowstrasse, Baden-Baden. **Cable:** Südwestfunk Baden-Baden. **Te:** 761. – **Studios: Freiburg i Br.:** Günterstal, Kyburg. **Mainz:** Deutschhausplatz 8. **Tübingen:** Matthias-Koch-Weg 7. – "Zweigstellen". **Kaiserlautern:** Auf dem Sess. **Koblenz:** Januarius-Zick-Str. 8. **Trier:** Christophstrasse 24.
L.P: Vorsitzender des Rundfunkrates: Vacant, Vorsitzender des Verwaltungsrates: Dr. J. Knecht, Freiburg i Br. Intendant: Senator h.c. Prof. Fr. Bischoff. Programmdir. u. stellvertretender Intendant: L. Hartmann. Tech. Dir: Dr. H.v. Braunmühl. Verwaltungsdir: A. Manke. Press u. Inf: H.R. Fröbel. Leiter Freiburg Studio: E. Brugger. Leiter Mainz Studio: T.W. Zwermann. Leiter Tübingen Studio: A.G. Richter.

HOME SERVICE

PRGR: I: Sun 05.50–24.00. W 04.45–23.10 (Wed 24.00, Sat 01.00).

M Waves:	kc	m	kW		kc	m	kW
Baden-Baden	827	363	1.5	Trier	827	363	1
Freiburg	827	363	40	Rheinsender	1016	295	300
Kaiserlautern	827	363	3	Bodenseesender	665	451	300
Koblenz	827	363	0.5				

Short Wave: Bodenseesender 7265kc 41.29m 1.5kW.

FM	ch	Mc	kW		ch	Mc	kW
Baden-Baden	40	98.9	0.5	Koblenz	23	94.0	2.5
Betzdorf	20	93.1	0.35	Linz	35	97.4	18
Blauen	19	92.6	8.4	Potzberg	23	93.9	20
Feldberg/ Schwarzw.	36	97.9	1	Raichberg Wannenberg	24	94.3	12
Haardtkopf	20	93.0	25	Witthoh	19	92.8	1
Hochrheinsend.	14	91.1	0.07	Wolfsheim	11	90.4	37.5
Hornisgrinde	31	96.2	60		40	99.1	18

N, Wrp: 04.50(W), 06.00, 07.00, 08.45(W), 11.50, 15.00(W), 21.00, 23.00 – **"Tribune der Zeit":** W 18.30. Sun 18.40 – **"Deutsche Pressestimmen":** Mon–Fri: 12.05 – **Wrp:** 06.55, 18.30(W) – **Mbg:** Sun 17.10.

PRGR. II: Sun 05.50–24.00. W 04.45–23.10 (Wed 24.00. Sat 01.00).

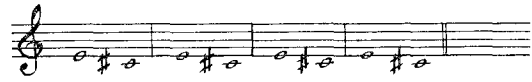
FM	ch	Mc	kW		ch	Mc	kW
Baden-Baden	13	90.9	0.5	Koblenz	15	91.6	2.5
Betzdorf	9	89.8	0.35	Linz	18	92.4	18
Blauen	7	89.2	8.4	Mainz	2	87.7	0.035
Eifel	14	91.8	8	Potzberg	13	90.8	20
WDR-Progr.	22	93.8	8	Raichberg	4	88.3	12
Feldberg/ Schwarzw.	9	89.8	1	Waldburg Wannenberg	14	91.2	18
Haardtkopf	10	90.0	25	Weinbiet	7	89.0	1
Hochrheinsend.	3	88.0	0.07	Witthoh	10	89.9	25
Hornisgrinde	22	93.5	60	Wolfsheim	18	92.4	37.5
					17	92.0	18

SPECIAL PRGR:

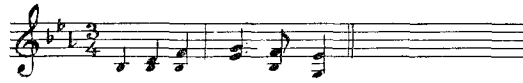
	ch	Mc	kW		ch	Mc	kW
Koblenz	30	96.5	0.5	Feldberg	23	93.8	0.5
Donnersberg	5	88.4	60	Waldburg	39	98.7	1.5
Hornisgrinde	38	98.4	0.7				

N, Wrp: 04.50(W). 06.00, 07.00(W), 09.00(Sun), 11.00(W), 13.45, (Sun), 15.00(W), 19.00, 21.30(W), 23.00 – **L.L: French by R:** Tues, Wed, Thurs 09.00–09.15 – **Wrp:** 06.55(W).
ANN: "Hier ist der Südwestfunk. Über Mittelwelle und UKW I hören Sie... Über UKW II hören Sie...". – **INT-SIG: Baden-Baden:** Motif from Mozart's "Zauberflöte": "Bald prangt den Morgen zu verkünden" (Piano).

Freiburg: Glockenmotiv des Freiburger Münsters: "Petrus und Maria".



Tübingen: "Droben im Oberland" (2 horns).



V. by QSL-card and letter. Rp.

Telefunken A.G. Germany, delivered 20 FM tr's: Baden Baden (2 × 025 kw), Blauen (2 × 3kw), Koblenz (2 × 0.3,2 × 1kw), Linz/Rhein (2 × 3kw), Potzberg (2 × 3kw), Wolfsheim (2 × 0.25, 2 × 3kw), Hornisgrinde (2 × 0.25, 2 × 10kw); studio equipments (recorders).
Kathrein Antennen, Germany: FM-Antennas.
Wilhelm Franz KG, Germany: delivered studio equipment.

WESTDEUTSCHER RUNDFUNK (WDR) (Anstalt des öffentlichen Rechts) – FI: By license payments.

ADDR: Wallrafplatz 5, Köln. **Cable:** WDR. **Te:** 20701 – **Studios:** Bonn, Dahlmannstrasse 14; Dortmund, Westenhellweg 86/88; Bielefeld, Lessingstrasse 3; Münster, Warendorfer Str. 1; Düsseldorf, Palmenstrasse 16; Essen, Lindenallee 56; Münster, Ludgeriplatz; Bonn (TV), Dahlmannstr. 30.
L.P: Intendant: Klaus von Bismarck. Verwaltungsdirektor und Justitiar: Dr. H. Brack. Sound Dir: Dr. F. Brühl. TV-Dir: Dr. Hans-Joachim Lange. Dir. Tec: W. Werner. Verwaltungsleiter: E. Przybylla. Int. Prgr. Austausch: Frau F. Hömke. Pressechef: J. Rick.

HOME SCE: First Prgr: W: 04.55–09.30, 10.45–00.10; Sun 05.55–00.10. **Night Prgr** (on 971kc only): 00.10–04.50(Sat night 05.50).

Medium Waves:	kc	m	kW		kc	m	kW
Aachen/Stolb	701	428	5	Münster	1502	199.7	0.8
Herford	701	428	2	Bonn	1586	189	5
Siegen	701	428	2	Kleve	1586	189	3
Langenberg	971	309	100				

FM. Common WDR and NDR mw prgr:

	ch	Mc	kW		ch	Mc	kW
Aachen-Stolb	3	88.0	5	Münster	17	92.0	6
Bonn	4	88.3	0.5	Nordhelle	11	90.3	15
Kleve	42	99.7	0.25	Siegen	34	97.1	0.5
Köln	3	87.8	0.5	*Wittgenstein*	6	88.7	15
Langenberg	6	88.8	100	Teutob. Wald	12	90.6	100
Monschau	2	87.7	0.04				

N, Wrp: W 05.00, 06.00, 07.00, 07.55, 11.00, 12.00, 15.00, 16.00 (W) no Wrp, 18.00, 20.30, 23.00; Sun: 06.00, 07.00, 07.45(Church N), *08.00, 12.00, 15.00, 18.00, 20.30, 23.00.* In *addition during* "Musik bis zum frühen Morgen" (5 mins. each) 01.00, 02.00, 03.00, 04.00 during night of Fri to Sat – **Comm:** Mo–Fri 12.10, 18.10, 20.45 – **Wrp:** Repeats of short version within music prgr's at 05.30, 06.30, 07.30.

Second Prgr: 04.55–23.00(Sat 24.00), Sun 05.55–23.00.

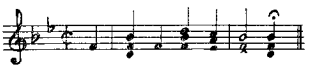
	ch	Mc	kW		ch	Mc	kW
Aachen-Stolb	23	93.9	5	Monschau	24	94.2	0.04
Bonn	19	92.8	0.5	Münster	24	94.1	18
Eifel	22	93.6	6	Nordhelle	22	93.5	15
Kleve	21	93.3	0.25	Siegen	19	92.6	0.5
Köln	16	91.8	0.5	Teutob. Wald	21	93.2	100
Langenberg	27	95.1	100	Wittgenstein	18	92.3	15

N, Wrp: W 05.30, 06.30, 07.30, 11.30, 14.30, 17.00(no Wrp), 18.45, 21.30, 22.30; Sun 07.30, 11.45, 18.45, 21.30.
3rd Prgr: D 19.00–21.30 (approx.), Sun also 14.30–17.00 (approx.).

	ch	Mc	kW		ch	Mc	kW
Langenberg	41	99.2	100	Nordhelle	37	98.1	15
Münster	9	89.7	6	Teutob. Wald	33	97.0	100

N: Wed–Sat 19.00.
Prgr. for foreign Workers: Aachen-Stolberg ch 30 95.5Mc 5kW: Langenberg ch 45 100,4Mc 50kW – Teutoburger Wald ch 33 97.0Mc 5kW.
Freq's subject to changes.

17.00 Turkish, 17.45 Italian, 18.30 Spanish, 19.15 Greek, 20.00–21.00 International Musicprgr.
ANN: MW-Prgr: "Westdeutscher Rundfunk Erstes Programm" – FM-Prgr: "Westdeutscher Rundfunk, Zweites Programm", "Westdeutscher Rundfunk, Drittes Programm".
INT-SIG: M.W. Prgr: Motif from "In allen guten Stunden" (L. van Beethoven). Electronic instrument.



V. by QSL-card or letter. Re. to Technische Direktion – **F.PL:** Extension of prgr. for Foreign workers. Langenberg 50kW (ERP) probably on 100.4Mc.

Wilhelm Franz KG, Germany: EMT studio equip.

RIAS-BERLIN (Berlin West)

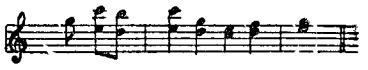
FI: By United States Information Agency.
ADDR: 1 Berlin 62, Kufsteiner Str. 69. **Cable:** Rias-Berlin. **Te:** 710271 – **L.P:** Dir: R. H. Lochner. Pol. Dir: R. Müllerburg. Dir. Prgr: H. Kundler. Dir. Tec: A. Pösniker. Dir. Listeners Rel. and Press: H. Kirstaedter.

STATIONS: [1]=RIAS I, [2]=RIAS II, [3]=VOA.

	kc	m	kW	
Berlin-Britz[2]	683	439	100	04.00–16.57(Sun 15.40)
Hof[2]	683	439	40	17.00(Sun 15.43)–03.50
Hof[1]	737	407	40	04.00–16.57(Sun 15.40)
Berlin-Britz[2]	854	351	100	17.00(Sun 15.43)–03.50
Berlin-Britz[1]	989	303	300/200	24 h
München[3]	1196	251	300	20.00–21.00, 00.00–01.05
Berlin-Britz	6005	49.96	20	as 989, exc. 00.00–01.05 as 1196kc
München[3]	6005	49.96	100	03.55(Sun 04.00)–18.00
Berlin-Britz	6005	49.96	20	18.00–03.45(Sun 03.50)

FM: Berlin-Britz: ch24 – 94.3Mc 50kW[1], ch9 – 89.6Mc 30kW[2].

D.PRGR: RIAS I+II: 23.00–17.00(Sat 13.30, Sun 09.00).
N. and Wrp: 23.00, 00.00, 01.00, 02.00, 03.00, 04.00, 04.30, 05.30, 06.30, 07.30, 08.30, 10.30(W), 11.30(W), 12.30(W), 15.30 – **RIAS I:** 12.00(Sun), 18.00, 20.30(W), 21.00(Sun), 22.00(W) – **RIAS II:** 18.30, 21.00(W), 11.30(Sun), 21.30(Sun) – **RIAS-VOA:** 00.00, 01.00, 04.00, 04.30, 05.30, 06.30, 07.15(W), 07.30(Sun), 11.00(W), 12.00(Sun), 12.30(Sun), 15.00(Sun), 15.30(W), 20.00, 20.50(W).
Folklore Music: Fri 18.30 (RIAS I) – **Rlg:** (RIAS I+II): Sun 06.15, 07.00, 07.35. W 05.40 – **L.L: English:** Tues, Thurs 14.30 (RIAS II), Wed, Fri 09.30 (RIAS I). **French:** Mon, Wed 14.30 (RIAS II), Tues, Thurs 09.30 (RIAS I) – **"Aus der Zone fur die Zone":** W 18.15 (RIAS I), 18.45 (RIAS II) – **"Das RIAS-Frühprogramm":** D 04.00–06.30 – **"Die europäische Stunde":** Sun 14.00 (RIAS II), 17.00 (RIAS I), Wed 20.00 (RIAS II) – **Mbg:** "Musik kennt keine Grenze": Sat 14.00. Sun 09.00 (RIAS II) – **Voice of America:** 09.30 (Tues, Fri RIAS II), 14.15 (Tues, Fri I), Sun 15.00 (I), 17.00 (II), Mon-Fri 17.00 (II), 17.45 (I), 21.45 (Mon II), 22.05 (Thurs I) – **Prgr. preview:** (for the coming week, at dictation speed) Sun 08.40, Mon 13.45, Fri 22.30 (II), Sat 13.30 (I), 17.40 (II)
ANN: "Hier ist RIAS-Berlin" – **INT-SIG:** From a Trio Sonata.



V. by QSL-card – **PUB:** Press service weekly **RIAS** educationbroadcast press service every six weeks.

Continental Electronics, USA: 1000kW-tr. Munich.
Telefunken AG, Germany: delivered mw-tr's: Hof (20/40kW), Berlin-Britz 1×20, 1×100, 1×300kW), FM-tr's: 1×0,25kW, 1×10kW, studio equip. recorders).

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It is not for the person with an idle mind—but written and prepared for the listener and radio-station, etc. with an open mind to what is going on within the wonderful world of Radio and TV . . . So we hope that the WRTH is for you—and that's why we invite you to take advantage of the yearly **Summer-Supplement** to the WRTH, which is published in June each year bringing your WRTH completely up-to-date. Available from your bookseller—or from WRTH CO. Ltd. —at the following prices:
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ALLIED STATIONS

AMERICAN FORCES NETWORK (United States Army)

The American Forces Network operates solely to provide American Forces in Europe with information, education and entertainment.
ADDR: American Forces Network, Europe APO 757, New York, N.Y, USA. **Te:** Frankfurt 314.880 – **L.P:** Commanding Officer: Lt. Col. J. Phinney. Prgr. Dir: F. Mc Laughlin. Techn. Supervisor: F. C. Mortensen.

STATIONS:	kc	m	kW		kc	m	kW
Nürnberg*	611	491	10	Würzburg	1142	263	0.25
Grafenwöhr	611	481	10	Bamberg	1304	263	0.25
Kaiserslaut*	611	491	10	Berchtesgaden	1304	230	0.25
Frankfurt*	872	344	150	Heidelberg	1304	230	1
Berlin*	935	321	10	Regensburg	1304	230	0.25
Ansbach	1034	290	0.25	Fulda	1304	230	0.25
Bad Kissingen	1034	290	0.25	Wertheim	1304	230	0.25
Munich*	1106	271	100	Bitburg	1394	215	0.25
Stuttgart*	1142	263	10	Hof	1394	215	0.25
Ulm	1142	263	1	Garmisch	1502	199.7	0.25
Goeppingen	1142	263	0.25	Giessen	1502	199.7	0.25
Bremerhaven*	1142	263	5	Straubing	1502	199.7	0.25
Hersfeld	1142	263	0.25	Rothwesten	1502	199.7	0.25
Schweinfurt	1142	263	0.25	Wildflecken	1502	199.7	0.25

FM: Berlin 87.85Mc 1.5kW, Frankfurt 98.7Mc 55kW, Stuttgart 102.4Mc 10kW. *=Studio Installations.
D.PRGR: 05.00(Sun 06.00)–00.05 (Berlin: 24 h) – **N:** Every h on the h (5 min) + major newscasts (15 min) at 06.00, 11.30, 17.00, 21.00 – **Hymns from Home:** Mon–Fri 05.05, 23.50 – **Request Shows:** 05.15, 06.20, 10.30, 11.05, 15.05, 16.05 – **Local N:** Mon–Fri 17.15. **Mon–Fri:** Report from Europe 19.00 **Wrp:** 05.00, 06.00, 11.15, 17.00, 19.15, 21.15 – **Rel:** Sun 09.30 (Catholic), 10.05 (Protestant).
ANN: "This is AFN, The American Forces Network, Europe" announced at least every half hour – **INT-SIG** Every h on the h. AFN announces the time and the sixth an final pip is exactly on the h as announced – **V.** by QSL-card. Records accepted – **PUB:** Prgr. sched. (weekly) not available to individuals.

Continental Electronics, USA, delivered 1kW mw-tr's (Kaiserlautern, Heidelberg, Berlin, Bremerhaven, Grafenwöhr), 10kW-tr. (Kaiserlautern).
Telefunken AG, Germany, delivered 1×0.3kW FM tr. (Berlin).

BRITISH FORCES BROADCASTING SERVICE (Military)

BFBS is operated by the War Office for the purpose of providing entertainment and a reliable news service for H.M. Forces in N.W. Germany and Berlin. It is a non-comm. organization, does not accept adv – **ADDR:** BFBS Cologne, 19. **Te:** 381757, Cologne Civil – **L.P:** St. Contr: P. Thurstan, Holland. Sen. Dir: A.S. Challoner.

FM-st's:	**Mc**	**kW**	**FM-st's:**	**Mc**	**kW**	**FM-st's:**	**Mc**	**kW**
Langenberg	96.5	50	Bonn	99.8	2	Berlin	98.75	1
Nordhelle	96.5	15	Herford	95.4	6	Drachenberg	93.0	80
Verden	97.6	50						

English: 05.30 (Sun 07.00)–22.30 (Sat 24.00) – **N (from BBC):** 07.00, 08.00, 12.00, 17.00, 21.00. **N** summaries on the half h hourly. **ANN:** "This is the British Forces Broadc. Sce. Germany" or "You are tuned to FBS in Germany" – **V.** by letter Rp – **PUB:** BFBS bulletin weekly.

RADIO CAE (Canadian Army Europe)

ADDR: CAPO 5050, Werl – **L.P:** St. Mgr: H. Konow. Prgr. Dir: B. McMillan.
STATION: 87.8Mc 0.25kW.
D. PRGR'S in English & French: Mon–Fri 05.30–23.00, Sat 09.00–24.00, Sun 09.00–23.00 – **N:** W 06.00, 12.00, 14.00, 16.00, 18.00, 21.30; Sun 13.00, 16.00, 18.00, 21.30 – **L.L** (Sprechen Sie Deutsch): Mon, Wed, Fri 09.00 – Musical entertainment; local N, Wrp, sports, ann, community affairs – Other prgr's rel. CBC Montréal.

RADIO FORCES FRANCAISES DE BERLIN (FFB)

Relay st. for entertainment of French Forces in Berlin.
ADDR: Kurt-Schumacher-Damm, Quarter Napoléon, Berlin-Reinickendorf – **FM:** 93.6Mc 3kW: Continuously exc. from 08.00–09.00 (Mon) and Thurs 23.00 – Fri 06.00 – **Rel:** RTF Programmes. **N:** 07.00, 12.00.

Telefunken AG, Germany, delivered tr.

RADIO FREE EUROPE (Private, non-comm.)

FI: By American contribution through the Radio Free Europe Fund.
ADDR: R. Free Europe, Division of the Free Europe Commit, 2 Park Avenue, New York 16, N.Y., USA. **Cable:** Natfecom, N.Y. **Te:** LExington 2–8900 – R. Free Europe Hqs, 1 Englischer Garten, München 22, Germany. **Cable:** Raduropa. **Te:** 229921 – **Raret** (Portugal relay base), Sociedade Anonima de R. Retransmissão, Av. Padre Manuel da Nobrega 8-B, Lisbon. **Cable:** Raretsa. **Te:** 721131.

L.P: Free Europe Commit. (New York): Pres: John Richardson, Jr. RFE Hqs (Munich): Dir: C. Rodney Smith. Dir. of Eng. and Sce's: R.E. Geiger. New York Office: Dir: R.E. Walter. Dep. Dir: Eng: W.H. Moffat. Portugal Rel. St: Man. Dir: H.C. Lolliot. Dir. of Eng: H.N. Black.

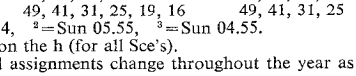
STATIONS: Medium Wave (System: Brown Boveri): Holzkirchen 719kc 417.2m 135kW.
Short Wave: Nine s.w. tr's in Biblis, Germany (10, 20, 50kW), four s.w. tr's near Lisbon, Portugal (10/50/100/250kW).

kc	m	kc	m	kc	m	kc	m	kc	m
3960	75.75	6160	48.70	9505	31.56	11820	25.38	15365	19.53
3970	75.57	6185	48.50	9595	31.27	11830	25.36	15405	19.47
3990	75.19	7105	42.22	9605	31.23	11855	25.31	15420	19.46
3995	75.09	7115	42.16	9655	31.07	11885	25.31	17725	16.93
5960	50.37	7140	42.02	9670	31.02	11895	25.22	17735	16.92
5965	50.29	7145	41.99	9695	30.95	11915	25.17	17770	16.88
5970	50.25	7155	41.93	9705	30.91	11930	25.15	17805	16.85
5985	50.12	7165	41.87	9710	30.90	11940	25.15	17835	16.82
5990	50.08	7175	41.80	9715	30.88	15115	19.85	17840	16.82
6015	49.88	7180	41.78	9720	30.86	15135	19.82	17855	16.80
6020	49.83	7190	41.72	9725	30.85	15145	19.81	17875	16.79
6025	49.79	7195	41.70	9750	30.77	15170	19.78	17885	16.78
6070	49.42	7205	41.64	11725	25.59	15185	19.76	21485	13.97
6080	49.34	7210	41.61	11735	25.56	15195	19.74	21600	13.89
6095	49.22	7225	41.52	11745	25.54	15215	19.71	21620	13.87
6105	49.14	7235	41.47	11755	25.52	15255	19.66	21665	13.84
6120	49.02	7245	41.41	11760	25.51	15265	19.66	21680	13.84
6125	48.98	7255	41.35	11775	25.48	15295	19.61	21720	13.81
6130	48.94	7285	41.18	11805	25.41	15355	19.54	21745	13.80
6140	48.86	7295	41.12	11815	25.39				

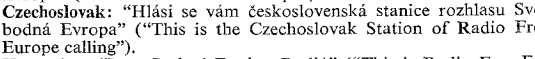
Most RFE freq's are registered for use both in Germany and in Portugal and the selection of tr. location is a function of propagation conditions throughout the year.
D.PRGR: directed to Bulgaria, Czechoslovakia, Hungary, Poland, and Rumania:

Bulgarian Prgr.	**Oct.-March m.b.**	**April-September m.b.**
04.00–06.00	49, 41, 31	49, 41, 31, 25
16.00–21.30	49, 41, 31, 25, 19, 16	49, 41, 31, 25, 19, 16
Czech-Slovak Prgr.		
03.54[1]–22.00	75, 49, 41, 31, 25, 19, 16	75, 49, 41, 31, 25, 19, 16
22.40–23.00	417, 75, 49, 41, 31	417, 75, 49, 41, 31, 25, 19
Hungarian Prgr.		
03.55[2]–23.00	49, 41, 31, 25, 19, 16	41, 31, 25, 19, 16
Polish Prgr.		
03.55[3]–06.00	417, 75, 49, 41, 31	417, 49, 41, 31, 25
06.00–17.00	49, 41, 31, 25, 19, 16	49, 41, 31, 25, 19, 16
17.00–23.00	417, 75, 49, 41, 31, 25	417, 49, 41, 31, 25, 19
Rumanian Prgr.		
04.00–06.00	75, 49, 41, 31	49, 41, 31, 25
16.00–21.30	49, 41, 31, 25, 19, 16	49, 41, 31, 25

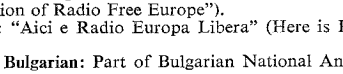
[1]=Sun 05.54, [2]=Sun 05.55, [3]=Sun 04.55.
N. every h on the h (for all Sce's).
Meter band assignments change throughout the year as propagation conditions vary.
ANN: Sign on and sign off: **Bulgarian:** "Took E Radio Svobodna Evropa" ("This is Radio Free Europe").
Czechoslovak: "Hlási se vám československá stanice rozhlasu Svobodná Evropa" ("This is the Czechoslovak Station of Radio Free Europe calling").
Hungarian: "Itt a Szabad Európa Radió" ("This is Radio Free Europe").
Polish: "Mówi rozglosnia Polska Radia Wolna Europa" ("This is the Polish station of Radio Free Europe").
Rumanian: "Aici e Radio Europa Libera" (Here is Radio Free Europe").
INT-SIG: Bulgarian: Part of Bulgarian National Anthem (Celeste):



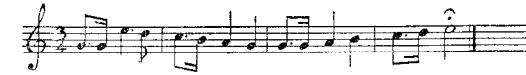
Czech/Slovak: Czech and Slovak National Anthem (Celeste):



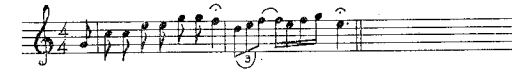
Hungarian: Old Hungarian folksong: "From the Tisza, past the Danube":



Polish: Polish patriotic song: "Hail Glorious Dawn of May". (Brass instruments):



Rumanian: Folk Motif (Orch & Flute):

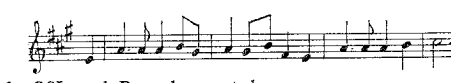


Wilhelm Franz KG, Germany, delivered EMT, studio equip.

RADIO LIBERTY (Pr.-Former Citizens of the U.S.S.R.)
Radio Liberty speaks to the peoples of the U.S.S.R. as the free voice of their fellow countrymen abroad. Radio Liberty is supported by the Radio Liberty Committee, Inc., which derives its funds from private persons and organizations in the U.S.A. and which also operates the transmitting facilities.
ADDR: Lilienthalstrasse 2, Munich 19. **Cable:** RadLibCom. Te: 68931. Exec. Dir. R. Liberty: L. W. Shollenberger. Headquarters, New York: Pres., Radio Liberty Committee, Inc: H. H. Sargeant.
STATIONS: Lampertheim (Germany): 50/20kW; Playa de Pals (Spain): 250/100kW; Pan Chiao (Taiwan): 50/25kW.

kc	m	kc	m	kc	m	kc	m	kc	m
3990	75.19	7255	41.38	9750	30.77	11960	25.08	15430	19.45
6055	49.55	7295	41.12	11725	25.58	11970	25.06	17745	16.91
6125	48.98	9565	31.36	11760	25.51	15340	19.56	17755	16.90
6170	48.62	9595	31.27	11825	25.37	15370	19.52	17885	16.77
7180	41.78	9660	31.06	11935	25.14	15395	19.49	17895	16.75
7215	41.58	9680	30.99						

D.PRGR: 00.00–24.00. Prgr's prepared in Munich.
Target areas: E. Germany 75, 49, 41, 31, 25m.b – Hungary 75, 49, 41m.b – No. So. Russian, Byelo-Russia, Ukraine 49, 41, 31, 25, 19 16m.b – Tartaristan, Bashkiristan, Caucasus, Turkestan 41, 31, 25, 19, 16m.b – N: Every half h.
ANN: Azerbajanian: "Danyshyr Azadlyk Radiosu" – Armenian: "Chosume "Azatutiun" Radiokayane" – Belorussian: "Gavaryts Radyio Svoboda" – Georgian: "Laparakobs Radiosadguri Thavisuphleba" – North-Caucasian: "Govorit Radiostantsia Svoboda" – Russian: "Govorit Radiostantsia Svoboda" – Tatar Bashkir: "Monda "Azatlyk" Radiostansyese Syuili" – Turkestan: "Gepleyar "Azatlyk" Radiosy" – Ukrainian: "Govorit Radio Svoboda" – **INT-SIG:** Hymn to Freedom – by Gretchaninoff.



V. by QSL-card. Records accepted.

VOICE OF AMERICA RADIO STATION IN GERMANY

ADDR: Voice of America, Washington 25, D.C. USA.
Medium Wave: Munich A 1196kc 251m 150kW: 02.30–07.30, 17.00–22.45 – **Short Wave:** Munich 100kW: 02.00–07.45, 12.00–22.45.

3980 kc	75.38 m	9545 kc	31.43 m	15190 kc	19.75 m
6040 –	49.67 –	9760 –	30.74 –	17735 –	16.92 –

Medium Wave: 02.30–03.00 Russian, 03.00–03.30 **English,** 03.30–04.00 Russian, 04.00–04.30 **English,** 04.30–04.45 Serbo-Croat, 04.45–05.00 Czech-Slovak, 05.00–07.30 **English,** 17.00–18.30 **English,** 18.30–19.00 Hungarian, 19.00–19.30 Serbo-Croat, 19.30–20.00 Polish, 20.00–20.30 Czech-Slovak, 20.30–21.00 **French** (to No. Africa), 21.00–21.15 Serbo-Croat, 21.15–21.30 Slovene, 21.30–22.00 Polish, 22.00–22.45 **English.**
Short Wave: See USA.
ANN: "This is the Voice of America Relay St. at Munich" – **INT-SIG:** Choir of brass playing a 10 note version of "Columbia, the Gem of the Ocean". See USA – V. by QSL-card. No return postage.

GERMAN DEMOCRATIC REPUBLIC

L.T: GMT+1 h – **Pr.L:** German.

STAATLICHES RUNDFUNKKOMITTEE (Go.)
ADDR: Berlin-Oberschöneweide, Nalepastrasse 18-50. **Cable:** Funkkomitee. Te: 632831 – **L.P:** Dir. Gen: Prof. Dr. h.c. G. Eisler, R. Grimmer. Dir. Adm: H. Ebel. Dir. Tec: W. Schmidt. Dir. Foreign Rel: M. Müller, Intendant: K. Ehrich (Deutschlandsender) H. Classen (Berliner Rundfunk), W. Kleinert (Radio DDR). C. Kirschnek (R. Berlin International).

HOME SERVICE:

Deutschlandsender: 24 h.					
185 kc	1621.6 m	200/1000 kW	692 kc	433.8 m	200 kW
782 –	383.6 –	250 kW	6115 –	49.06 –	20 –
728 –	412.1 –	220 –	7315 –	41.01 –	5 –

FM: Dequede 96.9Mc 1kW – Inselsberg 97.15Mc 10kW – Schwerin 95.25Mc 10kW – Leipzig 96.6Mc 10kW – Brocken 97.4Mc 10kW – Sonneberg 94.2Mc 1kW – Berlin 97.65Mc 3kW – Karl-Marx-Stadt 97.05Mc 1kW – Marlow 96.65Mc.
N.Wrp: 01.00, 03.05, 03.30, 04.00, 04.30(W), 05.00, 05.30(W), 06.00, 07.00, 09.00, 11.00(W), 12.00, 14.00(W), 16.00, 18.30, 21.00, 23.00, 24.00 – **Comm:** W 18.42, 23.10(rep), Sun 11.00, 23.10(rep) – **Folklore Music:** Sun 07.10(1st and 3rd week), Mon 10.30(2nd and 4th week) Wed 10.30, Fri 10.30, 00.35.

Berliner Rundfunk: 24 h

	kc	m	kW				
Karl-Marx-St.	602	498	20	Reichenbach	912	328.9	20
Berlin	611	491	300	Plauen	1079	278.1	20
Potsdam	656	457.3	20				

FM: Dresden 90.1Mc, Marlow 93.55Mc, Schwerin 98.55, Berlin 91.4 Mc, Brocken 91.55Mc, Leipzig 90.4Mc, Dequede 98.9Mc, Sonneberg 91.7Mc, Inselsberg 90.2Mc.
N, Wrp: 02.30, 03.00, 03.30, 04.00, 04.30, 05.00, 05.30, 06.30, 07.30(W), 09.30, 11.00, 11.30, 12.30(Sun), 14.00, 15.30, 18.30, 20.30, 22.30, 23.30 – **Comm:** 18.30, Sun 12.00 – **Folklore Music:** Tues 12.00, Thurs 11.05 (2nd week) –

Berliner Welle: 1358kc 220.9m 50kW – **FM:** Berlin 99.7Mc 10kW: 03.00–00.30 – **N:** 03.05, 04.00, 04.30, 05.00, 05.30, 06.00, 06.30, 07.00, 08.00, 12.00, 14.30, 15.00, 17.00, 18.00, 20.00, 22.00 – **Comm:** 18.09.

Radio DDR I: 24 h.

	kc	m	kW		kc	m	kW
Schwerin	529	567.1	20	Berlin	881	340.5	100
Greifswald	557	538.6	5	Dresden	1043	287.6	240
Leipzig	575	521.7	100	Suhl	1052	285.1	20
Erfurt	629	476.9	20	Seelow	1546	194.1	5
Cottbus	746	402.1	–	Bernburg	1570	191.1	–

FM: Berlin 95.8Mc, Marlow 88.25Mc, Helpterberg 95.95Mc, Brocken 88.95Mc, Leipzig 88.45Mc, Schwerin 89.2Mc, Inselsberg 87.85Mc, Dequede 89.4Mc.
N: 00.30, 01.30, 03.05, 03.30, 04.00, 04.30, 05.00, 05.30, 06.00, 06.30 07.00, 08.00, 09.00, 11.00, 12.00, 13.00, 14.00, 15.00, 16.00, 17.00, 18.00, 20.00, 21.00, 22.00, 23.00 – **Comm:** Sun 12.00, W 18.00 – **Folklore Music:** Tues, Thurs 07.05, Sat 07.05, 17.15.
Radio DDR II: 09.10–23.30.
FM: Marlow 91.05Mc 10kW, Leipzig 93.85Mc 10kW, Rheinsberg 90.5Mc 10kW, Karl-Marx-Stadt 92.85Mc 10kW, Schwerin 92.75Mc 10kW, Brocken 94.6Mc 1kW, Inselberg 92.55Mc 1kW, Cottbus 98.6 Mc, Görlitz 95.4Mc, Dresden 92.25Mc 1kW.
N: 09.00, 11.00, 12.00, 13.00, 16.00, 17.00, 18.00, 21.00 – **Comm:** W 18.00.

RADIO BERLIN INTERNATIONAL:

STATIONS:

kc	m	kc	m	kc	m	kc	m
1430	210.0	6160	48.70	9615	31.20	11820	25.38
1511	198.5	7300	41.10	9725	30.85	15240	19.69
5970	50.25	9530	31.48	9730	30.83	15340	19.56
6050	49.59	9550	31.41	11765	25.50	17740	16.91
6080	49.34	9560	31.38	11795	25.43	17825	16.83
6115	49.06	9600	31.25				

All tr's 30 min's exc. where indicated.

EUROPEAN SCE.
On 1511kc: 19.15 Danish, 19.45 Swedish, 20.15 English – **On 1430kc:** 15.30 Italian, 21.00 French, 21.30 Italian, 22.00 English, 22.30 Spanish, 23.00 English.
On 6080, 6115, 7300kc and 9730kc (only 15.30–18.00, 19.45–22.00): **English** 17.30, 20.15, 22.00 – **French** 18.30, 21.00 – **Danish** 18.00, 19.15 – **Italian** 15.30 (on 9730/11765kc) 21.30 – **Spanish** 22.30. **German** 16.30, 19.00, 20.45 – **Swedish** 17.00, 19.45 (DX-prgr. each Sat 17.00 and 19.45)

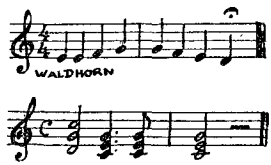
NEAR EAST SCE:
Arabic: 05.30–06.30 on 9600/9730/11765/15340kc, 11.00–12.30 on 9730/11765/15340/17740kc, 13.30–14.00 on 9730/15340/17740kc, also on 9600kc (to No.We. Africa), 19.00–19.30 on 9600kc, 18.15–18.45 to No. Africa on 5970kc, 21.15 – 21.45 to No. Africa, on 6160kc – **English:** 15.30 on 15340kc – **German:** 14.00 on 9730/15340/17740kc, also on 9600kc (to No.We. Africa).

AFRICA SCE: [1] to C. Africa [2] to We. Africa.
English: 04.15[1] on 11795kc, 06.30[2] on 9560kc, 12.45[2] on 17825kc, 16.00[1] on 11795kc, 17.15[2] on 11820kc, 20.00[1] on 9560kc – **French:** 04.45[1] on 11795kc, 06.00[2] on 9560kc, 11.00[1] on 17825kc, 12.15[2] on 17825kc, 17.45[2] on 11820kc, 19.30[1] on 9560kc, 20.30[1] on 9560kc – **German:** 05.15[1] on 11795kc, 16.30[1] on 11795kc, 18.15[2] on 11820kc, 23.00[2] on 5970kc – **Swahili:** 11.30[1] on 17825kc, 19.00[1] on 9560kc. **To No. Africa: English:** 21.30 on 5970kc – **French:** 17.15 on 9600kc, 22.00 on 5970kc – **German:** 17.45 on 9600kc – **Music:** 22.30 on 5970kc – **To Ea. Africa: English:** 16.00 on 11820kc, 20.00 on 9550kc – **French:** 19.30, 20.30 on 9550kc – **Swahili:** 15.30 on 11820kc, 19.00 on 9550kc – **German:** 16.30 on 11820kc.

LATIN AMERICAN SCE. (60 min's broadc):
On 9615kc (So. America), 9600kc (C. America); also 9725kc (So. America) to 00.30: **Portuguese:** 22.00, 01.00 – **Spanish:** 23.00, 02.00 – **German:** 00.00, 03.00.

SO. EA. ASIA SCE:
English: 07.00–07.30 on 15240kc, 12.00–13.00 on 11765/15240kc, 14.00–15.00 on 9530kc, 15.30–16.00 on 9530kc – **German:** 11.30–12.00 and 13.00–13.30 on 15240kc.

NO. AMERICA SCE:
On 5970/9560kc (to East Coast): **English:** 01.00, 02.30 – **German:** 01.30, 03.00, on 6050/9560kc (to West Coast): **English:** 03.45, 04.45 – **German:** 04.15.
ANN: E: "This is R. Berlin International the Voice of the German Democratic Republic". F: "Ici Berlin International, la République Démocratique Allemande vous parle". (Africa Sce: "Ici R. Berlin International, la Voix de la République Démocratique Allemande"). Swedish: "Här är R. Berlin International, Tyska Demokratiske Republikens sändning på svenska". Danish: "De lytter til R. Berlin International. Den Tyske Demokratiske Republik sender til Danmark". I: "Qui R. Berlino Internationale, la voce della Repubblica Democratica Tedesca". P: "R. Berlin Internacional, a voz da República Democrática Alemana". Sp: "Habla R. Berlin Internacional, la Voz de la República Democrática Alemana".
Foreign Service: Theme from Ludvig van Beethoven's 9th Symphony ("Freude, schöner Götterfunken"):



V. by QSL-card – **PUB:** "Unser Rundfunk" (weekly) free on request.

RADIO VOLGA (Sovjet Military Administration)
ADDR: Menzelstr. Potsdam.
STATION: Königswusterhausen 263kc 1141m 20/150kW.
D.PRGR: D. 05.00 (Sun 06.00)–22.35 (relay R. Moscow I) – **Special Prgr's for Sovjet Forces in E. Germany:** Sun 09.15–13.00, W 16.00–17.58 or 17.00–18.58, D 22.00–22.35. **ANN:** "Govorit Volga".

BROADCASTS OF THE SOVIET COMMITTEE FOR CULTURAL RELATIONS with fellowcountry-men in the German Democratic Republic: **ADDR:** Vertretung des Sowjetischen Komitees für kulturelle Beziehungen mit Landsleuten im Ausland, Behrenstr. 64/65, Berlin W 8, Postal Addr: Berlin NW. 63, P.O. Box 6. **Te:** 221480 – **L.P:** Pres: V. Kirillov. Further details see USSR.

GIBRALTAR (British Colony)

L.T: GMT+1 h – **Pr.L:** English, Spanish.
RADIO GIBRALTAR (Go, Comm.)
FI: By Go, adv – **AD:** 4 times daily – **ADDR:** Wellington Front Gibraltar. **Cable:** Broadcasts. **Te:** 2519.
L.P: Chmn. Gibraltar Broadc. Corpo: The Hon. C. R. Piccone. Managing Agents: Gibraltar Broadc. Ltd. Chmn: Lord Thomson. Managing Dir: J. M. Coltart. Gen. Man: H. J. Ramagge. Techn. Advisor: M. W. Hefferman.

O. I. R. T.

Review of the International Radio and Television Organization (O. I. R. T.):

RADIO & TELEVISION

published in English, French, Russian and German brings every 2 months valuable information on the world of Broadcasting and Television.

Subscription: The International Radio and Television Organization (O. I. R. T.), U Mrázovky 15, Praha 5, Czechoslovakia.

Gibraltar – Great Britain

STATION: Wellington Front 1484kc 202.2m 0.5/1kW.
HOME SCE: English, Spanish: 06.55–23.00. **N: English**: 07.00, 11.00 (exc. Sat), 12.30*, 20.00, 20.15*, **Spanish**: 13.00*, 13.15, 21.30*, 21.35 – **Wrp**: W 08.25, 13.30, Sun 08.30 – * Local N, other times relay BBC.

ANN: "This is Gibraltar" – **V.** by letter, Re. in English or Spanish. Recorded rep. accepted – **PUB**: Prgr. schedule free on request.

GREAT BRITAIN

L.T: GMT (Su: GMT+1 h) – **Pr.L**: English.

THE BRITISH BROADCASTING CORPORATION

The BBC is an independent body created by a Royal Charter and operated under a Licence and Agreement with the Postmaster-General. **FI**: The revenue for its Domestic Services is drawn from the licence fees paid by listeners and viewers; the revenue for its External Services is provided by a Grant-in-Aid from the Treasury. **PUB**: "Radio Times" "The Listener" (Weekly). "English by Radio and Television" (Fortnightly). "London Calling Europe" (Four weekly". "London Calling" (Monthly). "BBC Handbook" (Annually).

ADDR: Broadc. House, London, W. 1. **Cable**: "Broadcasts". Te: Langham 4468 – **Telex**: 22182.

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HOME SCE: W 06.40–23.45 approx. Sun 07.50–23.45 approx.

		kc	m	kW
Cromer	Northern	692	434	2
Moorside Edge	–	692	434	150
Whitehaven	–	692	434	2
Barrow	–	1484	202	2
Westerglen	Scottish	809	371	100
Burghead	–	–	–	100
Redmoss	–	–	–	5
Dumfries	–	–	–	2
Washford	Welsh	881	341	100
Penmon	–	–	–	8
Towyn	–	–	–	5
Wrexham	–	–	–	2
Brookmans Park	London	908	330	140
Ramsgate	–	1484	202	2
Start Point	West	1052	285	120
Barnstaple	–	–	–	2
Clevedon	–	1457	206	20
Bartley	–			10
Brighton	–	–	–	2
Folkestone	–	–	–	1
Bexhill	–	–	–	2
Redruth	–	–	–	2
Droitwich	Midland	1088	276	150
Postwick	–	–	–	7.5
Lisnagarvey	N. Ireland	1340	224	100
Londonderry	–	–	–	0.25
Stagshaw	Northern	1151	261	100
Scarborough	–	–	–	2

N: 07.00(W), 08.00, 09.00, 13.00, 18.00, 22.00, 23.00.
Greenwich T.S: 07.00(W), 08.00(D), 09.00, 11.00(W), 13.00, 18.00, 23.00.

LIGHT PRGR: W 05.30–02.00, Sun 06.55–02.00.

	kc	m	kW
Droitwich	200	1500	400
Brookmans Park	1214	247	50
Burghead	–	–	20
Lisnagarvey	–	–	10
Londonderry	–	–	0.25

	kc	m	kW
Moorside Edge	1214	247	50
Plymouth	–	–	0.25
Redmoss	–	–	2
Redruth	–	–	2
Newcastle	–	–	2
Westerglen	–	–	50

N: Mon–Fri 05.30 and every h on the half h until 20.30, 19.00, 22.30, 23.30, 23.55. Sat 05.30 and every h and on the half h until 12.30, 15.30, 17.30, 19.00, 19.30, 20.35, 22.30, 23.30, 23.55. Sun 07.00, 07.30, 08.30, 09.30, 10.30, 19.30, 22.30, 23.55.
Greenwich T.S: 06.45 (200kc only), 09.00(W), 10.00(W), 12.00, 14.00, 15.00(Mon–Fri), 19.00(W), 19.30(Sun), 20.30(Mon–Fri).
Opening SIG-TUNE: Oranges and Lemons 06.25(W), 14.00, 15.00 (Mon–Fri).

There are two versions of different durations, used alternately exc. Sun. Also, Harp arpeggio choice of six harp interludes.
THIRD PRGR: 20.00(Sat 18.00, Sun 17.00)–23.15.
647kc 464m: Daventry (150kW); Edinburgh, Glasgow, Newcastle, Redmoss (2kW) – **1546kc** 194m: Belfast, Bournemouth, Dundee, Exeter, Stockton (0.25kW); Brighton, Fareham, Leeds, Liverpool, Preston, Plymouth, Redruth, Swansea (1kW).
NETWORK THREE: Mon–Fri starts between 18.00 and 19.00–20.00. Sat & Sun afternoons variable times. (Transmitters as for Third Prgr).

FM:

Stations	Light	Mc Third Network Three	Home	Version of H. Sce.	kW (E.R.P.)
Ashkirk	89.1	91.3	93.5	Scottish	3/18*
Blaen-plwyf	88.7	90.9	93.1	Welsh	60
Divis	90.1	92.3	94.5	N. Ireland	60
Douglas	88.4	90.6	92.8	North	3/3
Dover	90.0	92.4	94.4	London	0.5/6.5*
Enniskillen	88.9	91.1	93.3	N. Ireland	2.5
Forfar	88.3	90.5	92.7	Scottish	2.4/9.6*
Fort William	89.3	91.5	93.7	Scottish	1.5
Haverfordwest	89.3	91.5	93.7	Welsh	0.42/10*
Holme Moss	89.3	91.5	93.7	North	120
Kinlochleven	89.7	91.9	94.1	Scottish	0.002
Kirk o'Shotts	89.9	92.1	94.3	Scottish	120
Les Platons	91.1	94.75	97.1	West	0.5/1.4*
Llanddona	89.6	91.8	94.0	Welsh	3/12*
Llandrindod Wells	89.1	91.3	93.5	Welsh	1.3
Llangollen	88.85	91.05	93.25	Welsh	5/11*
Londonderry	88.3	90.55	92.7	N. Ireland	2/13*
Meldrum	88.7	90.9	93.1	Scottish	60
North Hessary Tor	88.1	90.3	93.5	West	60
Oban	88.9	91.1	93.3	Scottish	1.5
Okehampton	88.7	90.9	93.1	West	0.0033/ 0.0125*
Orkney	89.3	91.5	93.7	Scottish	3/20*
Oxford	89.5	91.7	93.9 95.85	Midland	3.2/22*
Peterborough	90.1	92.3	94.5	Midland & East Anglian	1/21*
Pontop Pike	88.5	90.7	92.9	North	60
Redruth	89.7	91.9	94.1	West	1.1/9*
Rosemarkie	89.6	91.8	94.0	Scottish	3/12*
Rowridge	88.5	90.7	92.9	West	60
Sandale	88.1	90.3	94.7 92.5	North Scottish	120
Sheffield	89.9	92.1	94.3	North	0.059
Shetland	88.3	90.5	92.7	Scottish	1.4/9*
Skye (temp.)	–	–	93.9	Scottish	–
Sutton Coldfield	88.3	90.5	92.7	Midland	120
Tacolneston	89.7	91.9	94.1	Midland & East Anglian	120
Thrumster	90.1	92.3	94.5	Scottish	0.1/10*
Wenvoe	89.95	96.8	94.3 92.125	Welsh West	120
Wrotham	89.1	91.3	93.5	London	120

*=Directional aerial.

EXTERNAL SERVICES

kc	m	kc	m	kc	m	kc	m	kc	m
3952.5	75.90	6010	49.92	6110	49.10	6170	48.62		
3975	75.47	6035	49.71	6120	49.02	6180	48.54		
5965	50.28	6050	49.59	6125	48.98	6195	48.43		
5975	50.21	6070	49.42	6150	48.78	7110	42.19		
5990	50.08	6080	49.34	6165	48.66	7120	42.13		

kc	m	kc	m	kc	m	kc	m
7130	42.08	9705	30.91	12095	24.80	17860	16.80
7135	42.05	9710	30.90	15070	19.91	17870	16.79
7140	42.02	9725	30.85	15105	19.86	17880	16.78
7150	41.96	9735	30.82	15110	19.85	17890	16.77
7155	41.92	9740	30.80	15140	19.82	18080	16.59
7185	41.75	9750	30.77	15180	19.76	18150	16.53
7200	41.67	9755	30.75	15190	19.75	21455	13.98
7210	41.61	9760	30.74	15200	19.74	21470	13.97
7220	41.55	9765	30.72	15210	19.72	21490	13.96
7230	41.49	9770	30.71	15230	19.70	21530	13.93
7240	41.44	9825	30.53	15235	19.69	21550	13.92
7260	41.32	9915	30.26	15245	19.68	21595	13.89
7280	41.21	11705	25.63	15260	19.66	21600	13.89
7320	40.98	11710	25.62	15285	19.63	21610	13.88
7325	40.96	11720	25.60	15300	19.61	21615	13.88
9410	31.88	11750	25.53	15310	19.60	21630	13.87
9510	31.55	11770	25.49	15360	19.53	21640	13.86
9525	31.50	11780	25.47	15375	19.51	21660	13.85
9555	31.40	11790	25.45	15390	19.49	21675	13.84
9580	31.32	11800	25.42	15410	19.47	21680	13.84
9600	31.25	11820	25.38	15420	19.46	21710	13.82
9610	31.22	11840	25.34	15435	19.44	21740	13.80
9615	31.20	11860	25.30	15445	19.42	25650	11.70
9625	31.17	11880	25.25	17695	16.95	25670	11.66
9635	31.14	11890	25.23	17705	16.94	25720	11.66
9640	31.12	11905	25.20	17715	16.93	25840	11.61
9645	31.10	11910	25.19	17730	16.92	25850	11.60
9650	31.09	11920	25.17	17740	16.91	25920	11.57
9660	31.06	11930	25.15	17745	16.91	26040	11.52
9675	31.01	11945	25.12	17755	16.90	26080	11.50
9690	30.96	11955	25.09	17790	16.86		
9700	30.93	12040	24.92	17810	16.84		

The above freq's are shared between the European and Overseas Services and in addition the following freq's on Long and Medium Waves are used in the European Services.

200 kc 1500 m 647 kc 464 m 1295 kc 232 m

FM: Berlin 90.2Mc.

The column below show the wavebands which the BBC expects to use during the months from October to March. Details of wavelengths can be obtained from the programme journals, and are always announced at the microphone.

EUROPEAN SERVICES

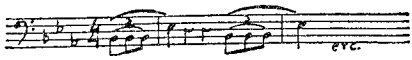
	Oct-March m.b.
In Albanian:	
17.45–18.15 N, Prgr.	49, 41
In Bulgarian:	
04.45–05.00 N, Prgr.	49, 41, 31
10.30–10.45 N, Prgr.	25, 19, 16, 13
15.30–15.45 E. by R. (Tues, Thurs, Sat)	31, 25
16.45–17.30 N, Prgr.	49, 41
21.00–21.15 N, Prgr.	49, 41, 31
In Czech:	
05.15–05.30 Tues, Thurs, Fri, Sun	1500, 232, 75, 49, 41, 31
14.00–14.15 N, Prgr.	41, 31, 25, 19
14.15–14.45 Sun only	31
19.00–19.30 N, Prgr.	75, 49, 41
19.30–19.45 E. by R. Sun, Tues, Thurs, Sat	49, 41, 31
20.45–21.00 Mon, Tues, Wed, Fri, Sat	49, 41, 31
In Slovak:	
05.15–05.30 Mon, Wed, Sat	1500, 232, 75, 49, 41, 31
11.45–11.30 N, Prgr.	41, 31, 25, 19, 16
18.00–18.15 N, Prgr.	75, 49
20.45–21.00 Thurs, Sun	49, 41, 31
In English:	
04.00–04.30 N, Prgr.	1500, 49, 41
05.30–05.45 E. by R.	464, 75, 49, 41
05.45–06.00 N, Prgr.	464
06.00–06.30 N, Prgr.	232, 75, 49, 41, 31
06.45–07.00 E. by R.	464, 232, 75, 49, 41, 31
09.15–09.30 Rlg. Sce. (W)	31, 25 (Summer)
10.15–10.30 Rlg. Sce. (W)	31, 25
12.30–12.45 E. by R. } 12.45–13.00 E. by Dict. } 13.00–13.15 N	41, 31, 25, 19, 16
17.00–17.15 E. by R.	232, 75, 49, 41, 31
17.15–18.30 N, Prgr.	232, 75, 49, 41, 31
18.30–18.45 E. by R.	49, 41, 31
19.30–20.00 E. by R.	232, 75, 49, 41
21.00–21.15 N, Prgr.	232, 75, 49, 41
22.30–22.45 N, Prgr.	232, 75, 49, 41
22.45–23.00 E. by R.	232, 75, 49, 41
In Finnish:	
15.30–16.00 (Sun)	41, 31
15.45–16.00 E. by R. (Mon, Wed, Thurs, Sat)	41, 31
16.00–16.45 N, Prgr.	41, 31
18.15–18.30 N, Prgr.	75, 49

	Oct-March m.b.
In French:	
05.30–05.45 N	232
06.30–06.45 N	232, 75, 49, 41
07.15–07.30 Prgr.	232, 49, 41, 31
11.30–12.15 N, Prgr.	232, 41, 31, 25
18.30–19.30 N, Prgr.	232, 49, 41
21.30–22.00 N, Prgr.	232, 75, 49
In German:	
04.30–05.15 N, Prgr.	1500, 232, 49, 41[1])
05.45–06.15 N, Prgr.	232, 75, 49, 41[1])
11.45–12.00 N	232, 41
12.00–12.15 Rlg. (Sun)	31, 25, 19
16.30–16.45 N, Prgr.	232, 75, 49, 41[1])
16.45–17.00 E. by R.	232, 75, 49[1])
19.00–20.00 N, Prgr.	232, 75, 49, 41[1])
20.00–21.00 N, Prgr.	232, 75, 49[1])
[1]) also 90.2Mc (Berlin).	
In Greek:	
05.00–05.15 N, Prgr.	49, 41
11.45–12.00 N, Prgr.	19, 16
16.00–16.15 E. by R. (Sun, Mon, Wed, Fri)	31, 25
19.00–19.30 N, Prgr.	41, 31
In Hebrew:	
21.15–21.45 N, Prgr.	49, 41, 31
In Hungarian:	
05.30–05.45 N, Prgr.	49, 41, 31
06.30–06.45 N, Prgr.	75, 49, 41, 31
12.15–12.30 N, Prgr.	31, 25, 19, 16
16.30–16.45 N, Prgr.	49, 41, 31, 25
19.30–19.45 E. by R. (Mon, Wed, Fri)	49, 41, 31
19.45–20.30 N, Prgr.	49, 41, 31
22.00–22.15 N, Prgr.	75, 49, 41
In Italian:	
17.30–17.45 N, Prgr, E. by R.	49, 41
22.00–22.30 N, Prgr.	232, 75, 49
In Polish:	
04.15–04.30 N, Prgr.	232, 49, 41
06.15–06.30 N, Prgr.	232, 75, 49, 41, 31
12.00–12.15 E. by R. (Wed, Sat)	31, 25, 19
13.00–13.15 N, Prgr.	—
14.15–14.30 N, Prgr.	41, 31, 25
18.15–19.00 N, Prgr.	75, 49, 41
21.15–22.00 N, Prgr.	232, 75, 49, 41
In Portuguese:	
07.30–07.45 N, Prgr.	49, 41
21.15–21.30 N, Prgr.	49, 41
22.15–22.30 N, Prgr.	49, 41
In Rumanian:	
05.00–05.15 N, Prgr.	49, 41, 31
13.45–14.00 N, Press Rev.	31, 25, 19
15.30–15.45 E. by R. (Mon, Wed, Fri)	31, 25
16.00–16.15 N, Prgr.	41, 31, 25, 19
19.30–20.15 N, Prgr.	49, 41, 31
21.45–22.00 N, Prgr.	49, 41
In Russian:	
03.45–04.00	464, 75, 49, 41, 31
11.00–11.15 N, Prgr.	31, 25, 19, 16
14.45–15.30 N, Prgr.	41, 31, 25, 19
15.30–15.45 (Mon, Wed, Thurs, Sat)	41, 31, 25, 19
15.30–16.00 (Tues, Fri)	41, 31, 25, 19
17.00–17.15 E. by R.	75, 49, 41, 31, 25, 16
17.15–18.00 N, Prgr.	75, 49, 41, 31, 25, 19
20.15–21.00 N, Prgr.	75, 49, 41, 31
In Spanish:	
13.15–13.30 N, Prgr.	25, 19
13.30–13.45 E. by R. (Mon, Wed, Thurs, Fri)	25, 19
21.30–22.15 N, Prgr.	49, 41
In Turkish:	
05.45–06.00 N, Prgr.	49, 41
15.45–16.00 N, Prgr.	31, 25
16.00–16.15 E. by R. (Tues, Thurs, Sat)	31, 25
18.30–19.00 N, Prgr.	49, 41, 31
In Serbo-Croat:	
14.15–14.30 N, Prgr.	25, 19
14.30–14.45 E, by R. (Mon, Wed)	25, 19
14.30–14.45 N, Prgr. (Sun)	25, 19
15.15–15.45 Slovene (Sun)	41
16.15–16.30 N, Prgr.	41, 31, 25
18.15–18.30 Slovene	49, 41, 31
20.15–21.00 N, Prgr.	49, 41, 31

GREENWICH T.S: at the h are radiated on one or other of the European Prgr's on the long, medium or sw. normally scheduled at 04.00, 05.00, 06.00, 11.00, 12.00, 14.00, 16.00, 17.00, 18.00, 19.00, 21.00, 22.00 – **Big Ben:** 12.00, 19.00, 21.00.

ANN: E: "This is London calling in the European Service of the BBC" – **F:** "Ici Londres" – **G:** "Hier ist der Londoner Rundfunk –

I: "La Voce di Londra" – INT-SIG. (for European Service): Morse Signal "V" (V for Victory) played on Timpani (i.e. ...–).



OVERSEAS SERVICES:

GENERAL OVERSEAS SERVICE:
The General Overseas Service, which operates for 22 3/4 hours a day, (03.00–08.00, 09.15–03.00) and which can be heard at suitable listening times all over the world, is addressed to English-speaking listeners wherever they may be. All Prgr's are in English. The times at which the General Overseas Service is directed to various parts of the world and the appropriate wavebands are:

Australia:	Oct–March m.b.		Oct–March m.b.
06.00–08.00	49, 41, 31, 25	20.00–22.15	41, 31
09.15–11.30	19, 16	22.15–22.30 (W)	41, 31
New Zealand:			
06.00–08.00	49, 41, 31, 25, 19, 16	20.00–22.15	41, 31
09.15–11.30	19, 16	22.15–22.30 (W)	31, 25
Japan, No. China, NW. Pacific:			
09.15–11.30	19		
So. Ea. Asia, India, Pakistan, Ceylon:			
01.45–02.15	49, 41, 31	09.15–18.15	31, 25, 19, 16,
23.00–00.30	49, 41, 31		13
Ea. Africa, Arabia, Cyprus, Egypt, Iraq, Iran, Israel, Jordan, Lebanon, Sudan, Turkey:			
03.00–08.00	75, 49, 31, 25, 19	09.15–21.15	49, 41, 31, 25, 19, 16, 13
Malta, Greece, Italy, C. Mediterranean, No. Africa:			
04.00–08.00	75, 49, 41, 31, 25, 19	09.15–22.45	49, 41, 31, 25, 19, 16, 13
C. and So. Africa:			
04.00–08.00	41, 31, 25, 19	09.15–22.45	41, 31, 25, 19, 13
Gibraltar, W. Mediterranean, We. Africa, No. We. Africa:			
05.00–08.00	49, 41, 31, 25, 19	09.15–22.45	49, 41, 31, 25, 19, 16, 13
Southern Atlantic:		**Canada, USA, Mexico:**	
22.00–00.30	31	21.15–02.45	49, 31
We. Indies, Ce. America, So. America (No. of Amazon):			
11.00–11.15	19	22.45–03.30	49, 31, 25
20.00–22.30	49, 31, 25		
So. America:			
20.00–03.30	31, 25, 19		

N: 00.00, 02.00, 03.00, 04.00, 05.00, 06.00, 07.00, 09.15, 11.00, 13.00, 14.00, 16.00, 18.00, 20.00, 22.00, 23.00 – N. about Britain: 00.09, 03.09, 07.20, 13.09, 18.09 – R. Newsreel: 00.15, 06.15, 07.45, 14.15, 18.15. From the Editorials: 01.50(exc. Sun), 03.30, 05.09, 07.15, 09.30, 14.15. Greenwich T.S: 00.00, 02.00, 03.00, 04.00, 05.00, 06.00, 07.00, 09.00, 11.00, 13.00, 14.00, 16.00, 17.00, 18.00, 20.00, 22.00, 23.00.
Big Ben: 14.00(Full Strike).
Short Wave Listeners Corner: Wed 00.30, Fri 09.35 and 16.45.
ANN: "This is the General Overseas Service of the BBC".
INT-SIG: Bow Bells.
The General Overseas Service is also rebroadcast by the BBC Far Eastern Station and by the East-Mediterranean-Relay.

PACIFIC SERVICE (English):	Oct–March	m.b.
Australia, N. Zealand:	08.00–08.45	41, 31, 25

ASIAN SERVICE:

China, Japan: m.b.			m.b.
11.00–11.30	16, 13	12.00–12.45	25, 16, 13
South-East Asia:			
10.30–13.00	16, 13	13.15–14.15	25, 19, 16, 13
India, Pakistan, Ceylon:			
10.00–10.30	16, 13	14.15–15.45	25, 19, 16

Iran:
16.15–17.00 31, 25, 19
10.00 Bengali (Mon, Wed, Sat), Sinhalese (Tues, Fri), Tamil (Sun, Thurs), 10.30 Indonesian, 11.00 Japanese, 11.30 Vietnamese, 12.00 Standard Chinese, 12.30 Cantonese, 12.45 Malay, 13.15 Thai, 13.45 Burmese, 14.15 Urdu, 15.00 Hindi, 16.15 Persian.

ARABIC SERVICE

M. East, C. Mediterranean:			
	Oct–March m.b.		Oct–March m.b.
03.45–05.45	75, 49, 41, 31	11.00–21.00	41, 31, 25, 19, 16, 13
Ea. Africa:			
03.45–05.45	49, 41, 31	11.00–21.00	41, 31, 25, 16, 13
No. Africa, Morocco, We. Mediterranean:			
04.45–05.45	49	11.00–21.00	41, 31, 25, 19

SCE. TO EA. AFRICA:

Oct–March m.b.		Oct–March m.b.	
03.30–03.45	Swahili 75, 49, 41, 31	14.30–15.00	Somali 19, 13
10.00–10.15	Swahili 19, 16, 13	15.00–15.45	Hindi 19
10.15–11.00	English 19, 16, 13	15.45–16.15	Swahili 31, 19, 16
14.15–15.00	Urdu 19	17.00–17.30	Somali 31, 25, 19

SCE. TO WE. AFRICA:

05.45–06.00	Hausa 49, 41, 31	13.45–14.15	Hausa 19, 16, 13
06.30–07.00	Hausa 31, 25, 19	19.30–19.45	Hausa 31, 25, 19
11.00–12.00	English 19, 16, 13		

SCE. TO MAURITIUS:
09.45–10.00 (altern. Mon) in English/French in 16.13 m.b.
SCE. TO C. AFRICA: Oct–March m.b.
09.45–10.00 English 19, 16, 13 (Tues, Thurs only)

SCE. TO WEST-EQUATORIAL AFRICA, NO. AFRICA:

French	m.b.		m.b.
05.15–05.45	49, 41, 31	12.00–13.30	19, 16, 13
06.30–07.00	31, 25, 19	18.30–19.30	31, 25, 19

SCE. TO MALTA:
15.10–15.15 Maltese 25, 19
SCE. TO FALKLAND ISLANDS: Oct–March m.b.
22.15–22.45(Sun) English: 49, 31, 25
SCE. TO W. INDIES:
22.30–22.45(W) English 49, 31, 25

NORTH AMERICAN SCE (Canada, USA, Mexico):
15.30–17.30 25, 19m.b. Summer 14.30–16.30** 19, 16m.b.
*English exc. 15.52(Fri), 16.55–17.00(Mon–Fri), 17.15(Thurs), when French. ** English exc. 14.52(Fri) 15.55–16.00(Mon–Fri), 16.15(Thurs) when French.

LATIN AMERICAN SERVICE:
Brazil, Portuguese: 23.00–00.15 41, 31, 25m.b.
C. America, Colombia, Ecuador, Guiana, Mexico, Peru, Venezuela: Spanish: 01.15–03.15 49, 31m.b.
Argentina, Bolivia, Chile, Paraguay, Uruguay: Spanish: 00.15–02.15 31, 25m.b.
N. in Spanish: 00.15, 01.15, 02.00, 03.00 – **N. in Portuguese:** 23.00, 00.00.

BBC FAR EASTERN STATION: See Singapore.
EAST MEDITERRANEAN RELAY: See Cyprus.
CENTRAL MEDITERRANEAN RELAY: See Malta.
SO. ATLANTIC RELAY: See Ascension Isl.

VOICE OF AMERICA RELAYS IN GREAT BRITAIN (BBC)

ADDR: Voice of America, Washington 25, D.C. USA.
STATIONS: Woofferton 50/250kW: 02.00–07.30, 14.00–22.00.
D.Prgr: See USA.

GREECE

L.T: GMT+2 h – **Pr.L:** Greek.

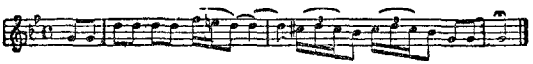
NATIONAL HELLENIC BROADCASTING INSTITUTE

(Ethnikon Idhryma Radiophonias, Go, Statutory of Public Law). **FI:** By license payments and adv – **ADDR:** Mourouzi Str. 16, Athens 138. **Studios:** Zappeion Bldg, Athens 118. **Cable:** RadiostAthens. **Te:** 714151 – **L.P:** Pres. of the Adm. Council: G. Sophronopoulos. Dir. Gen: A. Peponics. Dir. Tec: V. Aslanides. Dir. Pub. Rel: A. Margaritis.

STATIONS:	kc	m	kW		kc	m	kW
Athens (Nat)	728	412.1	150	Comotini	1403	213.8	5
Athens (2' Prgr)	1385	216.8	50	Volos*	1484	202.2	1
Athens (3' Prgr)	665	451.2	15	Rodos*	1493	201.0	5
Thessaloniki I	791	379.2	50	Patras*	1511	198.5	0.2
–	6095	49.22	35	Chania*	1511	198.5	5
–	9710	30.90	35	Amalias*	1562	192.1	1.25
Thessaloniki II*	1043	287.6	5				
Corfu*	1007	298.0	50				

* Nat & Reg.

HOME SCE: Nat. Prgr: D 04.55–23.00 – N: W 05.15, 05.45*, 06.15, 07.45, 11.00, 12.30, 16.55, 17.30**, 19.30, 22.00, Sun 05.15, 05.25*, 11.00, 16.55, 17.30**, 19.30, 22.00. * English & French, ** incl. Newsreel – **Wrp:** 05.28, 13.20(W), 17.55 – **Nat. Music:** Mostly at 05.30–07.00, 10.30–10.45, 17.00–17.30. **Rlg. (Orthodox):** Sun 05.30–08.00, Sat 16.15–16.30.
Thessaloniki I: 791kc: 04.55–22.15; 6095kc: 18.00–18.30; 9710kc: 11.00–13.00. N: 05.10, 16.00, 22.00. **Calling Greeks in Europe:** D 18.00–18.30, Thurs, Sat 21.15–22.15.
Nat. & Reg: Approx. times of tr. as **Nat. Prgr.**
2' Prgr: W 05.00–07.00, 08.00–13.15, 17.00–21.30, Sun 05.00–21.30. (Light prgr's, mainly) – **3' Prgr:** D 17.00–22.00 (serious music only).
ANN: Nat. Prgr: "Ethnikon Proghramma" – **2' Prgr:** "Dhéfteron Proghramma" – **3' Prgr:** "Triton Proghramma" – **Reg.Prgr:** "Edhó... (Athinai, Kérkyra, Thessaloniki, Patras etc.)" (This is... (Athens, Corfu, Saloniki, Patras etc)).
STATION-SIG: Used by all m.w.-st's of NBI: "Tsopanakos imouna" (Once I was a shepherd boy), a folk song played on native flute and sheep bells



INT-SIG: "Musical Box", played on vibraphone.
V. by QSL-card or letter. Rp. preferred. Records accepted – PUB: "Radhioproghramma" (weekly in Greek) – F.PL: Two 100kW sw-tr's, FM.

FOREIGN SERVICE: Athens – 7.5/5kW.

5960 kc	50.34 m	9605 kc	31.20 m	17745 kc	16.90 m
6075 –	49.38 –	11720 –	25.60 –	17780 –	16.87 –
6175 –	48.58 –	11925 –	25.15 –	21485 –	13.96 –
7140 –	42.01 –	15345 –	19.55 –	25645 –	11.69 –
7295 –	41.12 –	15425 –	19.44 –	25965 –	11.55 –

Schedule (Nov 64–May 65)
I=Cyprus; II=Egypt; III=Turkey/Balkans; IV=Gt. Britain/France; V=No. We. Europe; VI=Mediterranean.

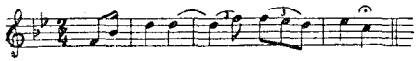
Times	Area	kc	Times	Area	kc
07.00–08.15	I	9605/11720	17.30–18.00	IV	11720/15345
09.00–10.00	II	9605/11720	18.30–19.00	I	7295/9605
10.30–13.00	I	9605/11720	19.30–21.00	V	9605/11720
13.30–15.15	III	7295/11720	22.00–22.30	VI	9605/11720
16.30–17.00	I	7295/9605	23.00–23.30*	VI	9605/11720

All prgr's in Greek; * repeat of 22.00 prgr. for ships.
ANN: Gr: "Edho Radhiophonikos Stathmos Athinon Vrachéon Kymaton". E: "This is R. Athens the Voice of Greece". F: "Ici R. Athenes la Voix de la Grece" – INT-SIG: See Home Sce – V. by QSL-card or letter. Recorded rep. preferred.

Wilh. Franz KG, Germany, delivered EMT studio equip.

FORCES BROADCASTING STATIONS (Greek)

ATHENS (Central)
FI: By adv. only – ADDR: Radhiostathmos Enoplon Dhynameon, 136-Messoghion St, Aghia Paraskevi, Athens. Te: 662929 – L.P: Dir. Gen: vacant Mgr: I. Kalogeratos. Dir. Tec: E. S. Tsamoussis.
STATIONS: 1300kc 230.6m 35kW – 1313kc 228.4m 20kW 6045kc 49.63m 5kW.
D.PRGR: W 04.30–09.45, 10.00–22.30, Sun 04.30–22.30. N: 05.00, 12.00, 19.00, 21.00 – L.L: (English): Mon, Wed, Fri 13.00–13.15 – NB: On weekdays mw-freq. changes to 1300kc for the period 07.00–09.45.
ANN: "Edhó Athinai, Kendrikós Radhiophonikós Stathmós Enóplon Dhynámeon Helládhos" (This is Athens, the Central R. St. of the Greek Armed Forces) – STATION-SIG: The main motif from the march "Greece never dies" played on trumpets.



V. by letter. Records accepted.

	kc	m	kW	h of tr.
Florina	1142	262.7	1	04.30–07.30, 10.00–13.00, 15.30–21.00
Jannina	7150	41.96	0.3	04.30–07.30, 10.00–13.00, 15.30–21.00
Kavalla	1355	221.3	1	04.30–07.30, 10.00–13.00, 15.30–21.00
Kozani	7215	41.58	0.5	04.30–07.30, 10.00–13.00, 15.30–21.00
Larissa	5955	50.38	0.5	04.30–07.30, 10.00–13.00, 15.30–21.30
Serrai	7151	41.98	0.5	04.30–07.30, 10.00–13.00, 15.30–21.00
Thessaloniki	1169	256.6	10	04.30–07.30, 10.00–13.00, 15.30–22.00
Tripolis	6003	49.97	0.5	04.30–07.30, 10.00–13.00, 15.30–21.00

PYRGOS BROADCASTING STATION (Priv).

(non profit association governed by an adm. council elected by free vote once every year by local subscribers – about 500 – who pay a monthly subscription of 10 drachma).
ADDR: 16 Diakou Str. Pyrgos, Ilias, Western Peloponnesus. Te: 550. Cable: Radio Pyrgos – L.P: Pres. of Adm. Council: G. Psarros. St. Mgr. J. Varonxis. Head English Section: G.P.M. Maniatopoulos. Dir. Tec: C. Tamvakis, V. Solomos.
STATION: 1448kc 207.2m 3kW.
HOME SCE: 05.00–13.00, 14.00–21.00, 00.00–03.00, N: 05.30, 20.30.
INTERNATIONAL SCE. in English: 00.00–03.00.
"Travelling in Greece – land of sun and blue skies": Wed, Sat 02.20–
'A letter in the Night" (Mbg): Thurs 02.20 (fortnightly) – "View from the 33rd floor": Sun 02.00.
ANN: Greek: "Edhó Pyrgos radiofonikós stathmós, dhitikis Peloponnissou". English: "This is the P.B.S. in Western Peloponnesus, Hellas" – V. by plain cards. Rp. Re. in English. Records accepted – F.PL: Prgr.schedule, pennants free to overseas listeners.

VOICE OF AMERICA RADIO STATION AT RHODES

ADDR: Voice of America, Washington 25, D.C. USA.
STATIONS:
Medium Wave: Rhodes A 1259kc 238m 150kW: 04.00–07.30, 16.00–21.30 – Short Wave: Rhodes 50kW: 04.00–07.30, 14.00–22.30.

6015 kc	49.88 m	7130 kc	42.08 m	9590 kc	31.28 m

D.PRGR: 04.00–06.00 Arabic, 06.00–07.30 English, 14.00–16.30 English, 16.30–17.00 Turkish, 17.00–17.30 Greek, 17.30–21.30 Arabic.
ANN: "This is the Voice of America Relay St. at Rhodes" – INT-SIG: Choir of brass playing a 10 note version of "Columbia, the Gem of the Ocean". See USA – V. by QSL-card. No return postage required.

VOICE OF AMERICA RADIO STATION AT THESSALONIKI

ADDR: Voice of America, Washington 25, D.C. USA.
STATIONS:
Medium Wave: Thessaloniki-A 791kc 379.2m 50kW: 04.55–06.30(Sun 10.30), 10.30–13.20, 15.30–23.00 – Short Wave: Thessaloniki 35kW: 11.00–13.00, 15.00–22.45.

5975 kc	50.21 m	7205 kc	41.64 m	9710 kc	30.90 m

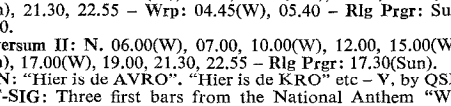
Medium Wave: 04.55–06.30(Sun 10.15), 10.15–13.20 & 15.30–17.15 Greek (R. Thessaloniki), 17.15–17.30 Greek, 17.30–18.00 Bulgarian, 18.00–18.30 Greek (R. Thessaloniki), 18.30–19.00 Rumanian, 19.00–19.30 Serbo-Croat, 19.30–20.00 Bulgarian, 20.00–20.30 Albanian, 20.30–21.00 Rumanian, 21.00–21.15 Serbo-Croat, 21.15–22.15 Greek (R. Thessaloniki), 22.15–22.30 English, 22.30–23.00 Hungarian.
Short Wave: See USA.
ANN: "This is the Voice of American Relay St. at Thessaloniki" – INT-SIG: Choir of brass playing 10 note of "Columbia, the Gem of the Ocean". See USA – V. by QSL-card. No return postage required

HOLLAND

L.T: GMT+1 h – Pr.L: Dutch – Fee: 18 f.

NEDERLANDSCHE RADIO UNIE

ADDR: P.O. Box 150, Hilversum. Cable: Radiounie. Te: 48506. Telex: 14470 – HOME SCE: Provided by the following broadcasting societies:
A.V.R.O: Algemeene Vereniging Radio-Omroep, Head Office Amsterdam, Keizergracht 107. Studios: Hilversum, 's-Gravelandseweg 52. L.P: Chmn: Dr. L. H. Slotemaker. Dir. Sound: J. M. van Oorvest. Dir. TV: S. van der Zee. Adm. Dir: J. C. Bongenaar.
K.R.O: Katholieke Radio-Omroep: Head-Office: Amsterdam, Keizersgracht 151. Studios: Hilversum, Emmastraat 52 – L.P: Chmn: H. W. van Doorn LL.D. Secr: Dr. L. J. N. van der Hulst. Treasurer: Th. Loerakker. Man. Dir: Drs. A. J. J. v. D. Made. Dir. Sound: W. Wagenaar LL.D. Dir. TV: J. J. A. Casteleijns.
N.C.R.V: Nederlandsche Christelijke Radio Vereeniging, Schuttersweg 8, Hilversum – L.P: Chmn: A. B. Roosjen LL.D. Secr: G. A. Kieft. Man. Dir. Sound & TV: A. H. v. d. Veen LL.D.
V.A.R.A: Omroepvereeniging VARA, Heuvellaan 33, Hilversum – L.P: Chmn: J. A. W. Burger LL.D. Secr-Treasurer: J. Mulder. Prgr. Secr. (Sound): J. B. Broeksz. Prgr. Secr. (TV): J. W. Rengelink.
V.P.R.O: Vrijzinning Protestantse Radio-Omroep, 's-Gravelandseweg 65, Hilversum – L.P: Chmn: Dr. J. S. de Koning. Treasurer: Ir. K. Kooy. Dir. (sound and TV): Dr. I. J. van Houte. Secr: Drs. I. J. van Houte.
Central addr. for Prgr. Publications: Central Bureau voor den Omroep in Nederland, Hilversum, P.O. Box 52 (for Sound & TV).
BOARD OF THE NEDERLANDSCHE RADIO-UNIE:
Chmn: A. B. Roosjen LL.D. Secr: J. Mulder. Treasurer: AA. Bakker LL.D. Members: J. B. Broeksz, J. C. Bongenaar, H. W. van Doorn LL.D, Drs. A. J. J. v. d. Made, J. M. van Oorvest, A. H. v. d. Veen LL.D.
STATIONS:
Hilversum I: 746kc 402.1m 120kW – II: 1007kc 297.9m 120kW.
Rel: Hengelo, Hoogezand, Hulsberg: 1594kc 188m 7.5kW.
FM-rel-st's: (I=rel. Hilversum I, II=rel. Hilversum II): Hoogezand 94.9Mc (I), 97.45Mc (II), Hulsberg 92.1Mc (I), 95.3Mc (II), Irnsum 93.95Mc (I), 98.95Mc (II), Lopik 92.9Mc (I), 96.5Mc (II), Markelo 91.7 (I), 96.2 (II), Mierlo 90.9 (I), 94.5 (II), Roermond 88.1 (I), 88.2 (I), 90.9 (II), 97.6 (I), 94.5 (II), 95.3 (II), 95.6 (II), 97.1 (II), 97.7 (II) 99.2 (II), 98.2Mc (II).
D.PRGR: Hilversum I & II: W: 06.00–23.00, Sun: 07.00–23.00.
Hilversum I: N: 06.00(W), 07.00, 08.45(Sun), 12.00, 18.00(W), 19.00 (Sun), 21.30, 22.55 – Wrp: 04.45(W), 05.40 – Rlg Prgr: Sun 09.00, 16.00.
Hilversum II: N. 06.00(W), 07.00, 10.00(W), 12.00, 15.00(W), 16.50 (Sun), 17.00(W), 19.00, 21.30, 22.55 – Rlg Prgr: 17.30(Sun).
ANN: "Hier is de AVRO". "Hier is de KRO" etc – V. by QSL folder.
INT-SIG: Three first bars from the National Anthem "Wilhelmus van Nassau"



Wilh. Franz KG, Germany, delivered EMT studio equip.
Telefunken AG, Germany, delivered studio equip. (recorders).

Holland

RADIO NEDERLAND WERELDOMROEP (non-comm.)
FI: By license payments – **ADDR:** R. Nederland, P.O.B. 222, Hilversum. Office: Witte Kruislaan 55, Hilversum. **Cable:** Mundivox. **Te:** 16151 – **L.P:** Dir. Gen: L.F. Tijmstra. Dep. Dir. Gen: C.J. Strop. Directors: Central Prgr.Sce: J.W. Acda. N. Sce: M.L. Snijders. Dutch Sce: F. Thors. Internat. Sce: H.J.P.J. van Eijndhoven. Transcription Sce: Lod. Prins. Dir. Tec: V.J. de Grijs. Producer "Happy Station" Prgr: Edw. Startz.

STATIONS: Lopik WO1 50kW; WO2, 3, 4 100kW; WO5 10kW.

kc	m	kc	m	kc	m	kc	m	kc	m
5980	50.17	9525	31.50	11780	25.47	15220	19.71	21480	13.97
5985	50.13	9590	31.28	11800	25.42	15275	19.64	21565	13.01
6020	49.83	9630	31.15	11915	25.18	15425	19.45	21570	13.91
6025	49.79	9715	30.88	11935	25.14	15445	19.42	21625	13.87
6035	49.71	9730	30.83	11950	25.10	17775	16.88	21665	13.85
6085	49.30	9745	30.79	11955	25.09	17800	16.85	21715	13.82
7110	42.19	11710	25.58	11960	25.08	17810	16.84	25610	11.71
7165	41.87	11730	25.58	15180	19.76	17840	16.82	26040	11.51
7210	41.61	11755	25.52						

Relaystation Bonaire, Neth. Antilles.
Mw: 800kc 375.0m 525kW
Sw 260kW (expected to come in operation Nov. 64):

kc	m	kc	m	kc	m
9705	30.91	11970	25.06	15440	19.43
9730	30.83	15435	19.44	17720	16.93

OPERATION SCHEDULE: I=So.Africa; II=M.East/Europe; III=Egypt/Libya/Europe; IV=Algeria/Morocco; V=Greater Caribbean area; VI=No.America; VII=N.Zealand VIII=Australia; IX=Africa/Europe; X=So.East Asia; XI=So.Asia; XII=M.East; XIII=We. Africa; XIV=So.America(North); XV=So.America (South) XVI=So.America(North)/We.Indies/Europe; XVII=Australia/N.Zealand; XVIII=So.Asia/Europe; XIX=No.Ea.Indonesia/Europe; XX=So.We.Indonesia; XXI=C.America/Mexico; XXII=Spain/No.Africa/Europe; XXIII=Australia/Japan; XXIV=Europe; XXV=So. & C.America; XXVI=N.Zealand/We.Indies; XXVII=Australia/N.Zealand/So.Asia/Japan; XXVIII=Australia/So.Asia/Europe; XXIX=N.America/Africa/Europe; XXX=N.America/Europe. If other freq's used $^{7}/_{3}$–$^{2}/_{5}$ 1965 these are given in brackets.

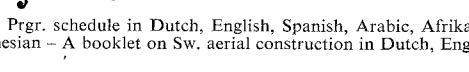
Language	Areas	Nov–May
Afrikaans		kc
15.30–16.20 (W)	I	15425, 11955 (17830, 15425)
Arabic		
14.30–15.50 (D)	II	11730, 9715 (15445, 11730)
16.00–17.20 (D)	III	11730, 9715, 6020
17.30–18.50 (D)	IV	11730, 9715
Dutch		
00.20–00.40 (D)	V	800 B
01.00–01.20 (Sun)	XIV	9590, 6085
02.30–03.50 (D)	VI	B 1)
06.00–07.20 (D)	VII	11730, 9525
07.30–08.50 (D)	VIII	11730, 9525
09.00–10.20 (Sun)	IX	21570, 17810, 6020 (21570, 17830, 6020)
09.00–10.20 (Sun)	VIII/X	21480, 11730 (21480, 15445)
11.00–12.20 (D)	X	21570, 15425
11.00–11.20 (W)	XII	17810, 9715, 6020 (17810, 15445, 6020)
12.30–13.50 (D)	XI	21570, 15425
17.00–17.20 (Sun)	XIV	15425, 15180 (17810, 15425)
18.00–19.20 (D)	IX	15220, 15180, 6020 (15220, 11955, 6020)
19.30–19.50 (Sun)	XIV	15425, 11730 (17810, 15425)
20.30–21.50 (Sun)	VI	9590, 6085
21.00–22.20 (D)	XIII	B 1)
22.00–23.20 (D)	XV	11730, 9590
23.30–01.20 (D)	XVI	9590, 6085, 6020
23.30–23.50 (Sun)	XIV	11800, 9715
English		
00.40–01.30 (W)	V	800 B
04.00–04.50 (D)	VI	B 1)
07.00–07.50 (W)	XVII	9715, 15445
14.00–14.50 (W)	XVIII	15425, 11710, 6020 (17830, 15425, 6020)
16.30–16.45*	VI	15425, 15180 (15425, 15220)
20.00–20.50 (W)	IX	11955, 9590, 6020
20.00–20.50 (D)	XIII	B 1)
20.30–20.50*	VI	9590, 6085 (15425, 11730)
21.00–21.50 (W)	VI	9590, 6085 (11730, 9590)
Indonesian		
12.00–13.00 (D)	XIX	17810, 15275, 6020 (17810, 15445, 6020)
13.15–14.15 (D)	XX	17810, 15275 (17810, 15445)
Spanish		
00.05–00.20*	XV	11800, 9715
00.30–01.20 (W)	XIV	11800, 9715
01.30–02.20 (D)	XXI	B 1)
15.00–15.15*	XV	17810, 15425 (21570, 17830)
17.35–17.50*	XIV	15425, 15180 (17810, 15425)
19.45–20.00*	XIV	15425, 11730 (17810, 15425)
20.10–20.25*	XV	15425, 11730
21.30–22.20 (W)	XXII	9715, 6020 (9715, 6085, 6020)
22.30–23.20 (D)	XV	B 1)
23.30–00.20 (W)	V	800 B
News in various languages		
17.00 17.50 (W)	XIV	15425, 15180 (17810, 15425)
19.00–20.05 (W)	XIV	15425, 11730 (17810, 15425)
21.00–21.20 (W)	XIV	15425, 11730 (15425, 9715)
23.00–23.50 (W)	XIV	11800, 9715
01.30–01.55 (W)	XIV	11800, 9715
Happy Station (English version)		
00.40–01.30 (Sun)	V	800 B
06.00–07.20 (Sun)	VII	15445, 9715
07.30–08.50 (Sun)	XXIII	15445, 9715
10.30–11.50 (Sun)	XXIV	9715, 5980, 6020
14.00–15.20 (Sun)	XI	15425, 11710, 6020 (17830, 15425, 6020)
15.30–16.50 (Sun)	IX	15425, 9590 (17830, 9590)
19.00–20.20 (Sun)	VI	11955, 9715 (11730, 9715)
Happy Station (Spanish version)		
20.30–21.50 (Sun)	XXII	11730, 9715, 6020
22.00–23.20 (Sun)	XXV	11800, 9715 (11800, 9715, 6020)
23.30–00.20 (Sun)	V	800 B
Dutch-by-Radio**		
01.30–01.50 (Sun)	XXVI	11730, 9590
05.30–05.50 (Sun)	XXVII	15445, 11730, 9715, 9525
10.30–10.50 (Sun)	XXVIII	15425, 9525
17.30–17.50 (Sun)	XXIX	15425, 15180, 6020 (15425, 15220, 6020)
20.00–20.20 (Sun)	XXX	9590, 6085, 6020

*=Tues and Fri only. **=broadc. on Tues during English tr's and repeated on Sun as indicated. B)=relaystation Bonaire. I)=on short-wave, freq's not yet chosen.

PROGRAMME SCHEDULE

NATIONAL MUSIC: The Amsterdam Concertgebouw Orchestra: In Dutch: Thurs 02.55, 06.25, 07.55, 11.25, 12.55, 18.25, 21.25, 22.25, 23.55 – **Indonesian:** Sun 12.10, 13.25, Wed 12.39, 13.54.
Other prgr. of Dutch music: Afrikaans: Mon 15.40. **Arabic:** Wed 15.10, 16.40, 18.10, Fri 15.15, 16.45, 18.15. **English:** Mon 00.52, 04.12, 07.12, 14.12, 20.12, 21.12. **Spanish:** Tues 00.45, 01.45, 21.45, 22.45, 23.45.
NEWS, COMM: Afrikaans: W 15.30. **Arabic:** D 14.30, 15.30, 16.00, 17.00, 17.30, 18.30. **English:** W 00.40, 04.00, 07.00, 14.00, 20.00, 21.00. **Indonesian:** D 12.00, 13.15. **Spanish:** W 00.30, 01.30, 21.30, 22.30, 23.30. **Dutch:** D 02.30, 06.00, 07.30, 11.00, 12.30, 17.00, 18.00, 21.00, 22.00, 23.30.
LISTENERS REQUEST PRGR: Afrikaans: Sat 15.40. **Arabic:** Thurs 14.50, 15.35, 16.20, 17.05, 17.50, 18.35. **Dutch:** Tues 00.35, 02.45, 06.15, 07.45, 11.15, 12.45, 18.15, 21.15, 22.15, 23.45. **English:** Tues 00.52, 04.12, 07.12, 14.12, 20.12, 21.12. **Indonesian:** Tues (2nd, 4th, 5th) 12.23, 13.38, Sat 12.22, 13.37. **Spanish:** Thurs 00.45, 01.45, 21.45, 22.45, 23.45.
MAILBAG: Afrikaans: Sat 15.40. **Arabic:** Sun & Thurs 15.10, 16.40, 18.10. **Dutch:** Wed (fortn) 00.25, 03.25, 06.55, 08.25, 11.55, 13.25. **English:** Wed (fortn) 04.20, 07.20, 14.20, 20.20, 21.20. **Indonesian:** Sun 12.35, 13.50. **Spanish:** Thurs 00.45, 01.45, 21.45, 22.45, 23.45.
DUTCH BY RADIO (Broadcast on Tues and repeated on Sun). Tues 07.00, 14.00, 21.00, 22.00, 04.00, Sun 01.30, 05.30, 10.30, 17.30, 20.30 – Details and printed texts available free of charge on application.
DX-PROGRAMMES: English: Thurs 07.12, 14.12, 20.12, 21.12. Fri 04.12. **Afrikaans:** Fri 16.00.

PRODUCTION "HAPPY STATION": The "Happy Station" Sun prgr's, 7 in English and 3 in Spanish & Portuguese. Now also on medium wave, for listeners in parts of USA and Latin America. Producer Edward Startz, on the air for more than 35 years, brings a wide range of music for all tastes, short features, descriptive commentaries and educational quizzes.
Each tr. carries a mailbag, calling to all parts of the world. The "Happy Station" prgr's **Every Sun.** (For freq's see operating schedule).
RELAY SERVICE twice weekly news-behind-the-news prgr. from correspondents in Eur. capitals for stations in U.S. and Latin-America.
ANN: Dutch: "Hier R. Nederland in Hilversum". **E:** "This is the International Service of R. Nederland in Hilversum, Holland". **Ind:** "Disini Hilversum Siaran Indonesia R. Nederland". **Sp:** "Aqui R. Nederland, Hilversum, Holanda". **Arabic:** "Huna Hilversum – al idha'atu'l hulandiya bi'l-lughati'l-Arabiya". **Afrikaans:** "Dit is R. Nederland Wereldomroep in Hilversum, Holland".
GENERAL INT-SIG: Old Dutch folk song called: "Merk toch hoe sterck" played on carillon or celeste – **V.** by QSL-card.

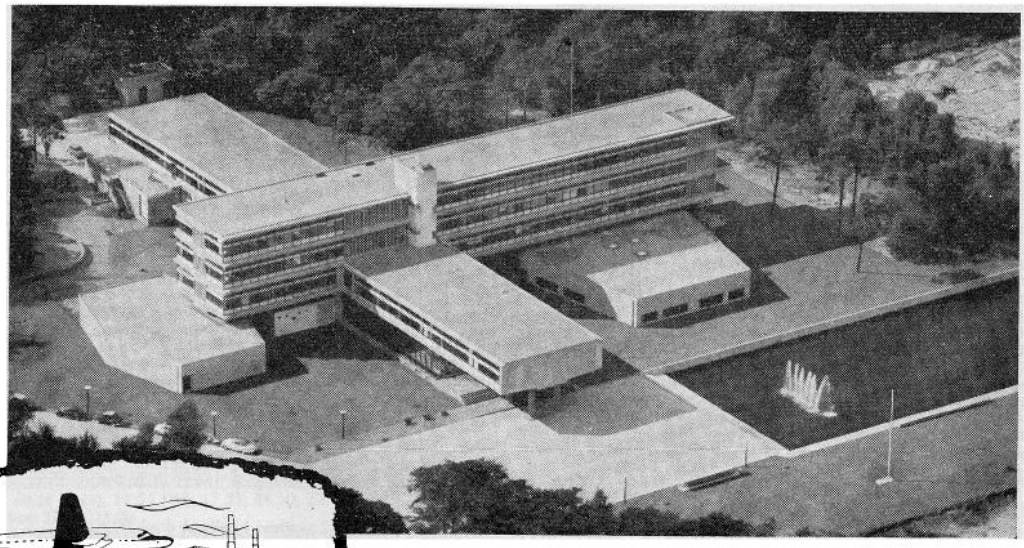


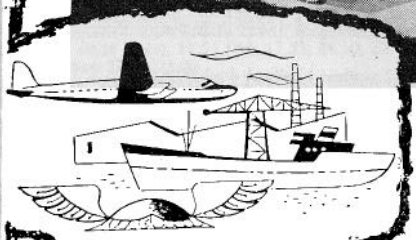
PUB: Prgr. schedule in Dutch, English, Spanish, Arabic, Afrikaans Indonesian – A booklet on Sw. aerial construction in Dutch, English,

DUTCH WORLD BROADCASTING SYSTEM

RADIO NEDERLAND

HILVERSUM-HOLLAND





daily broadcasts in

AFRIKAANS
ARABIC
DUTCH
ENGLISH
INDONESIAN
SPANISH

news, commentaries, actualities, feature-programmes, music - 100 K/W transmitters - 11, 13, 16, 19, 25, 31, 41, 49 metre bands, medium-wave programmes for northern Latin America, Central America and parts of the U.S. - programme bulletins free on application.

TRANSCRIPTION SERVICE

for free recordings of

- serious and light music
- entertainment-programmes
- feature spots, coverages
- topical talks, interviews

RELAY SERVICE

EUROPEAN REVIEW
AND TRANSATLANTIC PROFILE

twice a week for stations in Africa, Latin America and the U.S.

Spanish, Indonesian and Arabic. Also a diagram for building a sw. converter in Dutch, English. "Some useful hints" on sw. reception in English and Spanish. All the pub. are sent free of charge on application.

TRANSCRIPTION SERVICE a free sce. to foreign sts. Issues complete prgr. about Holland and Dutch life both informative and musical, and adapted to suit the requirements of the areas served.

Brown, Boveri, Switzerland, delivered 1 × 100kW swtr (Lopik).
Wilhelm Franz KG, Germany, delivered EMT studio equipment.

RADIO BLOMENDAAL
Station: 1233kc 254.3m. – **D.Prgr:** Sun 08.30–16.00(rlg).

HUNGARY

L.T: GMT+1 h – **Pr.L:** Hungarian.

MAGYAR RADIO ES TELEVIZIO (Go.)
ADDR: Brody Sandor-S.U. 5–7, Budapest VIII. **Cable:** Magyarrádió. **Te:** 338-330. **Telex:** 6-67 – **L.P:** Pres. & Gen. Mgr: I. Tömpe, Vice Pres: Dr. I. Hárs, Dr. K. Kiss. Dir. Adm: G. Mike. Dir. Tec: F. Bley. Dir. For. Rel: Mrs. V. Szarka, dr.

HOME SCE:	kc	m	kW
Kossuth, Budapest[1]	539	556.5	135
Petöfi II, Budapest[2]	872	344.0	36
Petöfi I, Szolnok[2]	1187	252.7	135
Balatonszabadi	1250	240	135
Nyiregyháza[2]	1340	223.8	25

	kc	m	kW
Szombathely[2]	1340	223.8	25
Pécs[2]	1340	223.8	15
Györ[2]	1349	223.3	0.4
Szolnok[2]	1349	223.3	0.4
Miskolc[2]	1594	188.2	15
Magyaróvár[2]	1594	188.2	0.4
Balatonszabadi[2]	1594	188.2	15

[1] W: 03.30–00.30, Sun: 05.00–00.30 – [2] W: 04.00–07.10, 13.00–22.15, Sun: 05.30–22.15. Reg st's: rel. R Petöfi exc. for reg. prgr's at 18.00–19.00 (Pécs 17.00–20.00, Györ 19.00–20.00, Sun also 09.00–10.00).
R. Kossuth: N, Wrp: W: 03.30, 04.30, 06.00, 09.00, 11.00, 14.00, 16.00, 19.00, 21.00, 23.00. Sun: 05.00, 07.00, 11.00, 16.00, 19.00, 21.00, 23.00.
R. Petöfi: N: W: 05.00, 07.00, 15.00, 17.00, 18.00, 20.00, 22.00. Sun: 22.00. **FM:** Budapest 66.62Mc 2kW – Pécs 69.02Mc, 2kW: 17.00–21.00
German (for Hungarian-Swabians): D 17.30–18.00 on 1340kc (Pécs).
ANN: "Kossuth Radio, Budapest – Petöfi Radio, Budapest".

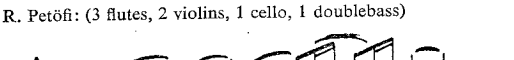
FOREIGN SERVICE

STATIONS: 15/100/135kW.

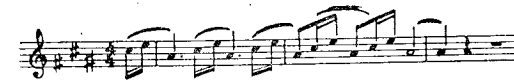
kc	m	kc	m	kc	m	kc	m
539	556.5	5880	57.02	7215	41.58	9833	30.51
1187	252.7	5900	50.84	7305	41.07	11910	25.19
1250	240.0	6234	48.10	7310	41.04	15185	19.75
1340	223.8	7120	42.13	9540	31.45	17795	16.86

TO EUROPE	1/11–28/2 kc	1/3–7/5 kc
English		
19.30–20.00	7305, 7215, 5900	9833, 7305, 7215
22.00–22.30	7305, 7215, 6234, 5900	9833, 7305, 7215, 6234
23.30–24.00	6234, 539	6234, 539
German		
10.00–11.00*	7215, 7120, 6234, 1250	7215, 7120, 6234, 1250
13.30–14.00*	9833, 7215, 7120, 6234, 1250	9833, 7215, 6234, 1250
18.00–18.30	5900, 1250	6234, 1250
19.45–20.00	6234, 1250	6234, 1250
21.30–21.45	6234, 1250	6234, 1250
22.30–23.00	1187, 1340	1187, 1340
Greek		
11.45–12.00(W)	9833, 7215, 7120, 6234	11910, 9833, 7215, 6234
12.00–13.00*	9833, 7215, 7120	11910, 9833, 7215, 7120
15.00–16.00**	9833, 7215, 7120, 6234	11910, 9833, 7215, 6234
17.00–17.30	7305, 7215, 6234, 5900, 1250	9833, 7305, 7215, 6234, 1250
19.30–19.45	6234, 1250	6234, 1250
20.00–20.15	7305, 7215, 6234, 5900, 1250	9833, 7305, 7215, 6234, 1250
Hungarian		
05.00–05.15	11910, 9833, 7215, 6234	15165, 11910, 9833, 7305
11.00–11.15(W)	15165, 11910, 9833, 7215	17795, 15185, 11910, 9833
14.00–16.00*	9833, 7215, 7120, 6234, 1250	11910, 9833, 7215, 6234, 1250
19.00–19.30	7305, 7215, 6234, 5900, 1250	9833, 7305, 7215, 6234, 1250
20.30–21.30	7305, 7215, 6234, 5900, 1250	9833, 7305, 7215, 6234, 1250
Italian		
11.30–11.45(W)	9833, 7215, 7120, 6234	11910, 9833, 7215, 6234
13.00–13.30*	9833, 7215, 7120, 6234	9833, 7215, 7120, 6234
17.30–18.30	7305, 7215, 6234, 5900, 1250	9833, 7305, 7215, 6234, 1250
20.15–20.30	6234, 1250	6234, 1250
21.45–22.00	6234, 1250	6234, 1250
Spanish		
20.15–20.30	7305, 7215, 5900	9833, 7305
21.30–22.00	7305, 7215, 5900	9833, 7305
TO NEAR EAST		
Arabic		
14.00–15.00	11910, 9833, 7215, 7120	15165, 11910, 9833, 7215
16.00–16.30	9833, 7215, 7120, 6234	9833, 7215
18.00–18.30	7215, 6234	9833, 7215
Turkish		
10.00–12.00*	11910, 9833, 7215, 7120	15165, 11910, 9833, 7215
16.30–17.00	9833, 7305, 7215, 6234, 1250	9833, 7305, 7215, 6234, 1250
18.30–19.00	7305, 7215, 6234, 5900, 1250	9833, 7215, 6234, 1250
TO NORTH AMERICA		
English		
00.30–01.00	9833, 9540, 7305, 6234	9833, 9540, 7305, 6234
01.30–02.30	9833, 7305, 6234	9833, 9540, 7305, 6234
03.00–03.30	9833, 9540, 7305, 6234	9833, 9540, 7305, 6234
03.30–04.00[1]	9833, 7305, 7215, 6234	9833, 7305, 7215, 6234
04.30–05.00	9833, 7305, 7215, 6234	9833, 7305, 7215, 6234
Hungarian		
00.00–00.30	9833, 9540, 7305, 6234	9833, 9540, 7305, 6234
02.00–03.00	9833, 7305, 7215, 6234	9833, 7305, 7215, 6234
04.00–04.30	9833, 7305, 7215, 6234	9833, 7305, 7215, 6234
TO SOUTH AMERICA		
Hungarian		
23.00–23.30	9837, 7305	9833, 7305
Spanish		
23.30–24.00	9833, 7305	9833, 7305
TO C. AMERICA		
Spanish		
01.00–01.30	9833, 9540, 7305, 6234	9833, 9540, 7215, 6234

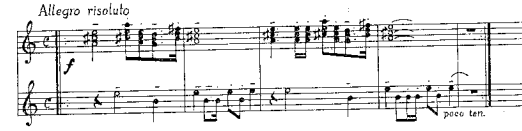
* Sun; ** Sat; *** Fri; [1] Musical prgr.
ANN: E: "This is Budapest, Hungary" – **INT-SIG:** R. Kossuth: (3 clarinets, 1 bass clarinet)



R. Petöfi: (3 flutes, 2 violins, 1 cello, 1 doublebass)



Foreign Service: Excerpts from the Suite "1848" by T. K. Polgar (3 trumpets, 2 cornets)



V. by QSL-card and letter. Records accepted – **PUB:** "Rádió és Televizió Ujság" (weekly).

ICELAND

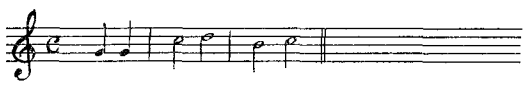
L.T: GMT–1 h (Su=GMT) – **Pr.L:** Icelandic.
ICELAND STATE BROADCAST SERVICE – RIKISUTVARPID (Go.)
ADDR: P.O. Box 120, Reykjavik. **Cable:** Utvarp.
L.P: Dir. Prgr. Council: B. Groendal. Dir. Gen: V.Th. Gislason. Dir. Adm: S. Thordarson. Dir. Prgr: A. Bjoernsson.
HOME SCE: W 08.00–11.00, 13.00–01.00. Sun 09.30–01.00.

STATIONS:	kc	m	kW
Reykjavik TFU	209	1435	100
Akureyri	737	407.1	5
Eidar	665	451.2	5
Hoefn	611	491.0	1
Breiddalsvik	1412	212.0	0.02
Neskaupstadur	1412	212.0	0.02
Djupivogur	1484	202.2	0.02
Fáskrúdsfjördur	1484	202.2	0.02

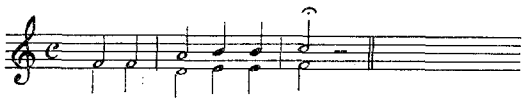
	kc	m	kW
Lón	1484	202.2	0.02
Raufarhöfn	1484	202.2	0.02
Eskifjördur	1510	198.5	0.02
Alftafjördur	1510	198.5	0.02
Thorshöfn	1510	198.5	0.02
Reydarfjördur	1520	197.4	0.02
Stödvarfjördur	1545	194.2	0.02
Reykjavik	9640	31.12	20

FM: Reykjavik: 94Mc 0.9kW, 98Mc 0.015kW, Raufarhöfn 91Mc 0.1kW.
N: W 08.30, 09.30, 11.10, 13.25, 16.00, 18.00, 20.30, 23.00. Sun 10.00, 13.25, 20.30, 23.00.

FOREIGN SERVICE in Icelandic:
On 9640kc: D 20.30–22.00. Sun also 13.00–15.00.
ANN: "Utvarp Reykjavik" – V. by QSL-card. Rp
INT-SIG: Home Service:



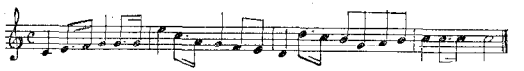
Foreign Sce:



The Marconi Company Ltd, GB: delivered 5kW tr's (Akureiry, Eidar), 20kW tr. (Reykjavik).
Brown Boveri, Switzerland: delivered 100kW tr. (Reykjavik).
Telefunken AG, Germany: delivered studio equip. (recorders).
Rohde & Schwarz, Germany: FM tr. & antennas.
AFRTS: See USA.

IRELAND

L.T: GMT (Su. GMT+1 h) – **Pr.L:** Irish, English.
RADIO EIREANN (Statutory Corporation)
FI: By state, license payments and adv – **AD:** 16 h per week.
ADDR: G.P.O. Dublin. **Cable:** Broadcasting. **Te:** 42981 – **L.P:** Chmn: E. Andrews. Dir. Gen: K.C. Mc. Court. Head of Management: J.A. Irvine. Contr. of Prgr: R.O. Farachain. Contr. of TV Prgr's: G. Rugheimer. Dir. of Eng: P.G. Parker.
STATIONS: Athlone 566kc 530m 100kW – Dublin 1250kc 240m 5kW – Cork 1250kc 240m 5kW.
HOME SCE: W 08.00–10.05, 12.55–15.00, 17.00–23.30. Sun 10.25–*11.15*, *12.30–23.30* – **N:** ***English*** *08.00* (W), *09.00* (W), *10.00*, *13.30*, 18.30, 22.15. **Irish** 18.01, 22.00 (W) – **Wrp:** English 08.10 (W), 09.10 (W), 10.25 (Sun), 12.55 (W), 17.55, 18.30, 22.15, 23.30 – **Irish Music:** Sat, Sun 22.30–23.00.
ANN: "Radio Eireann" – **INT-SIG:** Celeste and Harp playing 4 bars of Irish Air "O Donnell Abu" – V. by letter. **PUB:** RTV Guide.



Brown Boveri, Switzerland: delivered 5kW mw-tr's (Cork, Dublin), 100kW tr. (Athlone). Wilh. Franz KG, Germany: EMT studio equip.
Telefunken AG, Germany: delivered studio equip. (recorders).
AKG, Austria: delivered studio equip. (recorders, microphones).

ITALY

L.T: GMT+1 h – **Pr.L:** Italian.
RAI – RADIOTELEVISIONE ITALIANA
(State Service by public act to RAI)
FI: By license payments and adv – **AD:** 2.9% of broadc. time for radio. For TV: Nat. Prgr: 3.2%. 2nd Prgr: 2.2%.
ADDR: Via del Babuino 9, Roma. **Cable:** Raidirro. **Te:** 6764 – **L.P:** Pres: P. Quaroni. Vice Pres: G. Bassani, I. De. Feo. Man. Dir: Ing. Marcello Rodino. Dir. Gen: Dr. Ettore Bernabei. Vice Dir. Gen: Dr. Marcello Bernardi. Gen. Secr. (Dir. For. Rel): Dr. Gian Franco Zaffrani. Dir. Adm: Dr. Bruno Vasari. Dir. Prgr. (Radio): Maestro Giulio Razzi. Dir. Prgr. (TV): Dr. Sergio Pugliese. Dir. Radio & TV Inf. Sce.s: Dr. Luigi Beretta. Dir. Tec. Radio: Eng. Gino Castelnuovo. Co. Dir: Eng. Edoardo Cristofaro. Dir. Tec. TV: Ing. Gino Orsini. Co. Dir. Gen. Aff: Dr. Gregorio Pozzilli. Dr. Aldo Passante. Chief Pers: Dr. Marcello Severati. Dir. "Radiocorriere": Dr. G. Cane.
HOME SCE: No powers indicated owing to pending changes.

MEDIUM WAVES	Nat. prgr. kc	2 prgr. kc	3 prgr. kc		Nat. prgr. kc	2 prgr. kc	3 prgr. kc
Aosta 1)		1115		Trento 3)	1331	1448	1367
Alessandria 1)		1448		Belluno 4)		1448	
Biella 1)		1448		Cortina 4)		1448	
Cuneo 1)		1448		Venezia 4)	656	1034	1367
Torino 1)	656	1448	1367	Verona 4)	1578	1448	1367
Como 2)		1448		Vicenza 4)		1484	
Milano 2)	899	1034	1367	Gorizia 5)	1578	1484	
Sondrio 2)		1448		Trieste 5)	818	1115	1594
Bolzano 3)	656	1484	1594	Udine 5)	1331	1448	
Bressanone 3)		1484	1594	Trieste A 5)	980		
Brunico 3)		*1484*	*1594*	*(autonoma in Sloveno)*			
Merano 3)		1484	1594	Genova 6)	1331	1034	1367
La Spezia 6)	1578	1448		Napoli 13)	656	1034	1367
Savona 6)		1484		Salerno 13)		1448	
S. Remo 6)		1034		Bari 14)	1331	1115	1367
Bologna 7)	1331	1115	1367	Brindisi 14)	1578	1484	
Arezzo 8)		1484		Foggia 14)	1578	1448	
Carrara 8)	1578			Lecce 14)	1578	1448	
Firenze 8)	656	1448	1367	Taranto 14)	1578	1448	
Livorno 8)	1061		1594	Matera 15)	1578	1448	
Pisa 8)		1115	1594	Potenza 15)	1578	1448	
Siena 8)		1448	1367	Catanzaro 16)	1578	1448	
Perugia 9)	1578	1448		Cosenza 16)	1578	1484	
Terni 9)	1578	1448		*Reggio C 16)*	1331		
Ancona 10)	1578	1448		A gri gento 17)	1578	1448	
Ascoli P. 10)		1448		Catania 17)	1331	1448	1367
Roma 11)	1331	845	1367	Caltanis-			
Aquila 12)	1578	1484		setta 17)	566	1448	
Campob. 12)	1578	1448		Messina 17)		1115	1367
Pescara 12)	1331	1034		Palermo 17)	1331	1448	1367
Teramo 12)		1484		Cagliari 18)	1061	1448	1594
Avellino 13)		1484		Nuoro 18)	1578	1484	
Benevento 13)		1448		Sassari 18)	1578	1448	1367

1) Piemonte. 2) Lombardia. 3) Trentino Alto Adige. 4) Veneto. 5) Venezia, Giulia, Friuli. 6) Liguria. 7) Emilia, Romagna. 8) Toscana. 9) Umbria. 10) Marche. 11) Lazio. 12) Abruzzi, Molise. 13) Campania. 14) Puglia. 15) Basilicata. 16) Calabria. 17) Sicilia. 18) Sardegna.
FM: 1332 st's in Nat, 2nd and 3rd Prgr.
SHORT WAVES:
Nat. Prgr: Caltanissetta 6060kc 49.50m – 9515kc 31.53m.
W 05.30–13.00, 13.55–22.30. Sun 05.30–22.30.
N, Wrp: 06.00 (W), 07.00, 12.00 14.00, 16.00 (W), 19.00, 22.00.
Reg Prgr's (mw+FM only): 13.00–13.55.
Rlg: Sun 06.45 (Evangelistic), Sun 08.30 (Mass from R. Vaticana) – **Folklore Music:** 16.30 – **L.L:** 05.35 (Spanish: Mon, Wed, Fri; Portuguese: Tues, Thurs, Sat), 16.20 (French: Mon, Thurs; English: Tues, Fri; German: Wed, Sat).

2. Prgr: Caltanissetta 7175kc 41.81m W 06.45–11.20, 12.00–21.45, Sun 06.00–13.00, 13.30–21.45.
N, Wrp: Every h 07.30–21.30 exc. 11.30, 19.30.
Reg Prgr's (mw+FM only): 11.21–12.00.

3rd Prgr: Roma 3995kc 75.09m 17.30(Sun 16.00)–23.00 – **N:** 20.00.
3rd Network (on same frequencies as 3rd prgr): D 07.00–07.50 (Broadcasts for Tourists in French, German, English), 09.00–13.15.
Night Programme (Notturno dall Italia) on 845, 6060, 9515kc: 21.50 (Sun 21.40)–05.30. 7 h of music, parade: songs, melodies, opera music, dance music, folklore songs, symphony, operetta and jazz, with short newsbulletins in four languages (Italian & English each full h, French & German every h on the half h). On Sundays: "Holiday for a Continent" musical divertissement presented in Italian, English, French and German.

FOREIGN SERVICE

RAI – RADIOTELEVISIONE ITALIANA
ADDR: Casella Postale 320, Rome. **Te:** 489.171.
STATIONS: 50/60/100kW.

kc	m	kc	m	kc	m	kc	m
566	530.0	5985	50.13	9575	31.33	15325	19.58
845	355.0	6010	49.92	9585	31.30	15400	19.48
1115	269.0	7235	41.47	9630	31.15	17740	16.91
1331	225.4	7275	41.24	9710	30.90	17770	16.88
5960	50.34	7290	41.15	11810	25.40	17800	16.85
5965	50.29	9515	31.53	11905	25.20	21560	13.91

EUROPEAN SCE: "Rome Calling Europe".

Albanian:	**kc**
13.30–13.45	5960, 7290
17.45–18.00	6010, 7275
Bulgarian	
20.55–21.15	5985, 6010, 7290
Czech	
13.15–13.30	6010, 7235, 9630
18.25–18.35	5960, 7235, 9575
20.25–20.40	5960, 7275
Danish/Swedish*	
17.35–17.55	5960, 7235, 9575
English	
18.20–18.40	6010, 7275
French	
18.00–18.20	6010, 7275
German	
10.25–10.40	6010, 7275
13.30–13.45	6010, 7235, 9630
18.10–18.25[1])	*5960, 7235, 9575*
20.40–21.00	5960, 7275
Greek	**kc**
19.05–19.25	5960, 7275
Hungarian	
13.15–13.30	5960, 7290
21.35–21.55	5985, 6010, 7290
Italian	
15.35–15.55	6010, 7290, 9710
17.35–17.55[2])	5960, 7235, 9575
Lithuanian	
19.50–20.10	5960, 7275
Polish	
13.00–13.15	6010, 7235, 9630
17.35–17.45	6010, 7275
20.10–20.25	5960, 7275
Portuguese	
21.35–22.00	5960, 7275
Rumanian	
13.00–13.15	*5960, 7290*
20.35–20.55	5985, 6010, 7290

Russian
03.30–03.45 5965, 6010, 7275, 9575, 9630
14.05–14.20 7235, 9630
21.15–21.35 5960, 7275
Serbo Croat
10.10–10.25 6010, 7275
21.15–21.35 5985, 6010, 7290
Slovak
13.45–14.00 6010, 7235, 9630
21.00–21.15 5960, 7275
Slovene
13.45–14.00 5960, 7290
Spanish
22.00–22.25 5960, 7275
Turkish
19.25–19.50 5960, 7275
Ukrainian
18.40–19.00 6010, 7235
Belgian/Esperanto/English & French**
17.55–18.10 5960, 7235, 9575

*) Danish: Tues, Thurs, Sat. Swedish: Mon, Wed, Fri:**) For Belgium (F): Sat. Esperanto: Tues, Wed, Fri: E and F: Thurs: Italian: Sun – 1) for Austria – 2) Sun.

GENERAL OVERSEAS SERVICE

AU, NZ, FAR EAST

English	kc
09.00–09.40	11810, 15400, 17800
Italian	
06.50–08.55	11810, 11905, 15325 15400, 17800
20.00–20.30	7290, 9575, 9710
22.00–22.25	7290, 9575, 9710

SO EA, ASIA, FAR EAST

English, French	
10.45–11.25	9630, 11905, 15400

SOUTH AFRICA

English	
15.35–15.55	17770, 21560
Somali	
14.50–15.30	17770, 21560

AFRICA & NEAR EAST

Arabic	
06.25–06.45	6010, 7290, 9585, 11810, 11905
12.25–12.55	6010, 7290, 9630, 9710, 11810
19.05–19.55	6010, 7290, 9575
English	
09.20–09.40	6010, 7290
French	
09.00–09.20	6010, 7290

Italian	kc
10.45–11.25	17770, 21560
16.00–17.30	6010, 9575, 11810 17770, 21560

C. & SO. AMERICA

Italian	
18.40–19.00	11905, 15400, 17770,
22.30–00.30	5960, 6010, 9575,
01.15–03.05	9630, 9710
Portuguese	
00.30–00.50	6010, 9630, 9710
Spanish	
00.50–01.10	6010, 9630, 9710
03.05–03.25	6010, 9630, 9710

NO. AMERICA

English	
00.30–00.50	5960, 9575
03.05–03.25	5960, 9575
French	
00.50–01.10	5960, 9575

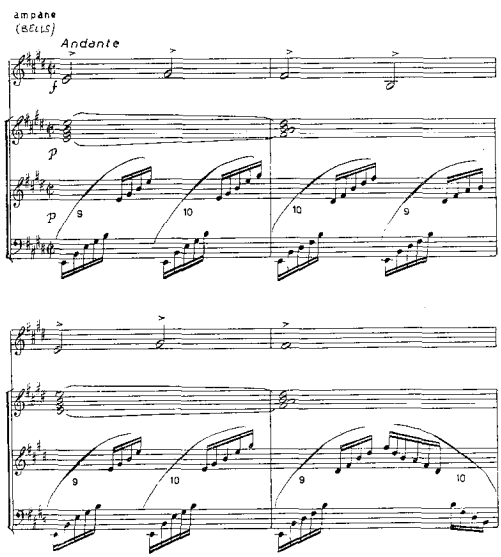
SPECIAL PRGR'S ITALIAN

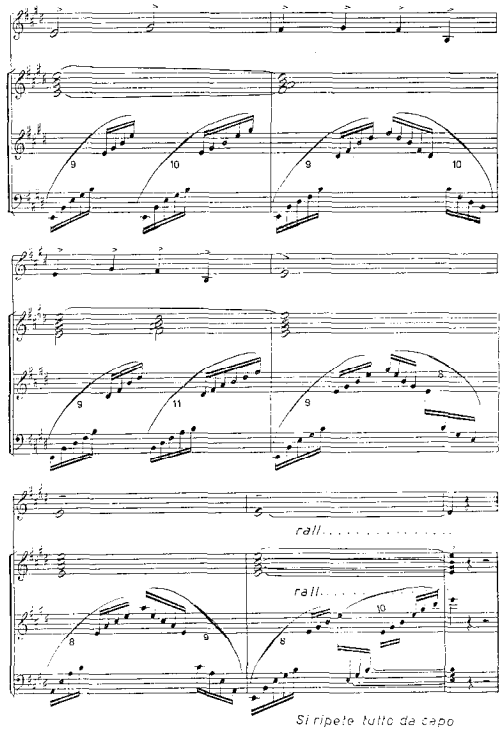
Press Review or Dictation News:	
07.50–08.55*	11810, 11905, 15325, 15400, 17800
14.05–14.45**	17740, 17800, 21560.

*) for Au/NZ, F.E – **) for No. & So. America.

ANN: "RAI – Radiotelevisione Italiana – Stazioni del (programma Nazionale, Secondo Programma, Terzo Programma)". Night prgr: "RAI – Radiotelevisione Italiana – Stazione de Roma ad onda media kc845 pari a m355 e stazioni ad onda corta di Caltanissetta kc6060 e. 9515 pari rispettivamente a m 49.50 a 3153" – "Notturno dall' Italia" Foreign Sce: I: "RAI-Radiotelevisione Italiana-Stazioni ad onda corta di metri...pari respettiramente a...megacicli per segundo – Trassmissione in lingua Italiana per... "E: "This is the Italian Radio & Television Sce. broadc. from Rome". F: "Ici la Radio Italienne". G: "Hier ist der italienische Auslandssendedienst in Rom".

INT-SIG: Bird chirping followed by bells (composition by A. Parelli).





V. by QSL-card – **PUB:** Prgr. schedule 3 times a year in E, F, G, I (Foreign Sce).

LUXEMBOURG

L.T: GMT+1 h – **Pr.L:** Luxembourgian, French.

RADIO LUXEMBOURG (Comm.)

FI: By adv – **ADDR:** Compagnie Luxembourgeoise de Télédiffusion Villa Louvigny, Luxembourg. **Cable:** Radio Luxembourg. **Te:** 25881 – **L.P:** Dir. Gen: M. Felten. Secr. Gen: G. Graas. Dir. Prgr: J. Luc.

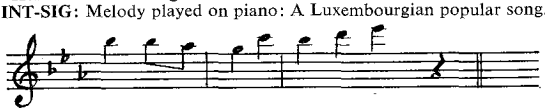
STATIONS (System: C.S.F.):
I 233kc 1287m 600kW – 15350kc 19.54m 5kW
II 1439kc 208m 350kW – 6090kc 49.26m 50kW
FM: 92.5Mc 50kW; 97Mc 100kW.

HOME SCE. in Luxembourgian on 92.5Mc: W 11.00–13.00, 17.30–21.00; Sun 09.00–21.00. **N:** 11.45, 18.00, 18.30.

FOREIGN SCE:
On 233/15350kc in French: W 04.40(Sun 05.59)–02.00 – **N:** W: 05.10, 06.00, 06.30, 07.00, 07.30, 08.00, 09.00, 10.00, 11.00, 12.00, 13.00, 14.00, 15.00, 16.00, 17.00, 18.15, 20.15, 21.00, 23.00, 24.00, 01.00, 02.00. Sun: 07.00, 08.00, 09.00, 10.00, 11.00, 12.00, 12.11, 13.00, 14.00, 17.00, 18.17, 20.00, 21.00, 23.00, 24.00, 01.00, 02.00.
Rlg. Prgrs. (French): Sun: 06.00–06.10, 07.30–07.45. Thurs 09.30–10.30
On 1439/6090kc in Flemish, German, English:
Flemish: W 04.45(Tues, Wed, Thurs 04.30)–11.00, Sun 04.45–13.00 – **N:** 06.32, 07.00, 08.00, 08.59, 09.59, 10.55 (Sun 07.37, 08.57, 11.00) – **German:** W 11.00(Sun 13.00)–18.00. **N:** W 17.55–18.00 – **English:** D 18.00–02.00.
On 97Mc in German and English:
German: 05.00(Sun 06.00)–11.00, 11.00–18.00 relay 1439kc, 18.00–21.00 – **English:** 21.00–02.00 relay 1439kc.
Rlg. Prgrs. on 1439/6090kc: English: 06.00–06.30 – **In German, French, Flemish:** W 04.45–06.30, Sun 04.45–07.30 – **Polish:** Mon 05.25–05.45 – **Russian:** Tues 05.20–05.40 – **Hungarian:** Sat 05.20–05.40.

ANN: F: "Ici R. Luxembourg". E: "Here R. Luxembourg". Fl: "Hier is R. Luxembourg". G: "Hier R. Luxembourg". Luxembourgian: "Hei ass R. Letzeburg".

INT-SIG: Melody played on piano: A Luxembourgian popular song.



V. by letter – **F PL:** 233kc 1250kw.

Advertisement

telecommunication journal

In the increasingly international age in which we live, it is more important than ever that everyone connected with radio should be in touch with authoritative world opinion on radio matters.

The Telecommunication Journal, the official organ of the International Telecommunication Union (ITU), serves just this purpose. Since 1869 (when it first appeared as the "Journal Télégraphique") it has faithfully covered all aspects of telecommunications which come within the purview of the world organization (now a UN specialized agency) set up in 1865 to regulate them.

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- articles by world experts, with a heavy emphasis recently on the latest developments in space communications-
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- a comprehensive list of articles of telecommunication interest appearing in the scientific press throughout the world –
- official ITU information, including lists of forthcoming ITU Conferences and other international telecommunication meetings –
- monthly sunspot predictions.

During 1965 the Journal will be marking the ITU's Centenary.

It is published monthly by the ITU in separate English, French and Spanish editions.

It costs 2 Swiss francs a copy. The annual subscription is 20 francs for one language edition, 30 francs for two and 40 francs for three.

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AUTHORITATIVE • READABLE • COMPREHENSIVE

Telefunken AG, Germany, delivered studio equip. (recorders) – Siemens & Telefunken AG delivered FM-antennas – Wilhelm Franz KG, Germany, delivered EMT studio equipm.

MALTA (State of)

L.T: GMT+1 h – Pr.L: English, Maltese.

MALTA BROADCASTING AUTHORITY an independent Authority, to regulate and supervise sound and television broadc. in Malta with power to prescribe and produce prgr's – **ADDR:** 12, Old Treasury Str, Valletta. **Cable:** Broadcasts. **Te:** Ce 21281 – **L.P:** Chmn: J. A. J. Montarano-Gauci, C.B.E, K.M, LL.D. Chief Executive: J. A. Manduca; Secr: A. J. Ellul.

RADIO MALTA

(Comm, a subsidiary of the Malta Television Service Ltd).
ADDR: P.O. Box 384, Gwardamanga. **Te:** 25051 – **STATIONS** (System: Gates): 214kc 247m 1kW – **FM:** 89.7Mc 1kW (ERP) – **D.PRGR. in Maltese & English:** Mon–Fri 11.30–12.30, 16.30–22.00; Sat 09.30–17.30, 19.59–23.00; Sun 09.30–17.30, 19.00–22.00. **N** (BBC): 20.00 – **F.PL:** Extension of broadc. times.

BRITISH FORCES BROADCASTING SERVICE MALTA

ADDR: B.F.B.S. Floriana, Malta, B.F.P.O. 51 – **L.P:** St. Contr: J. V. G. Russell. Sen. Eng: P. F. Blanchette.
STATION: 1425kc 211m 1kW.
D.PRGR. in English: 17.30(Sat 15.00, Sun 14.00)–23.00 – **N:** 19.00, 21.00(BBC) – **ANN:** "This is the British Forces Broadc. Sce. Malta" – **V.** by QSL-card. Rp. Records accepted – **PUB:** "GWIDA" (weekly) by courtesy Rediffusion (Malta) Ltd.

CENTRAL MEDITERRANEAN RELAY (Relays of BBC Arabic Sce.) for Libya/Tunisia: On 1178kc 254.5m 10kW.

Arabic: 03.45–05.45, 11.00–21.00.

REDIFFUSION (MALTA) LTD. (Priv. Comm.)

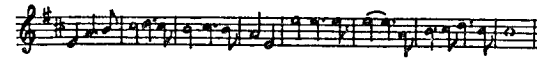
FI: from wired subscribers and adv – **ADDR:** P.O. Box 82, Gwardamanga. **Cable:** Rediffusion. **Te:** Central 25051 – **L.P:** Gen. Mgr: E. A. Hamilton-Hill, O.B.E. Chief Eng: A. J. Bartolo.
D.PRGR: Prgr. I: 06.00–23.00. Mainly BBC (GOS) with locally produced substitutions – Prgr. II: Maltese: 05.00–22.00. Local prgr's. The Marconi Company Ltd, GB, delivered: 5kW tr, ant, studioequip.

MONACO

L.T: GMT+1 h – Pr.L: French.

RADIO MONTE CARLO (Comm.)

ADDR: 16, Boulevard Princesse Charlotte, Monte Carlo, **Cable:** Radio Carlo. **Te:** 30.52.52 – **L.P:** Dir. Gen: J. Gondre. Dir. Tec: M. Auvray.
STATIONS: 1466kc 205m 400kW – 6035kc 49.71m 30kW – 7135kc 42.05m 30kW – **FM:** 93.5Mc 30kW.
HOME SCE: D 05.00–01.00 – **N:** From 06.00 to 18.00 every h on the h exc. 08.00, 18.30, 21.00, 23.00.
FOREIGN SCE: A 100kW sw-tr. in the 49, 41, 31, 25, 19m.b. (see Trans World Radio).
ANN: "Ici Monte Carlo" – **INT-SIG:** L'Hymne National Monégasque".



V. by letter – **PUB:** Weekly prgr.sched.

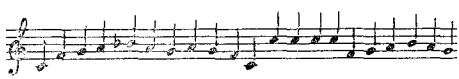
TRANS WORLD RADIO

Dedicated excl. to broadc. the Gospel of our Lord and Saviour, Jesus Christ and is maintained by free will contributions – Trans World Radio's prgr's are aired in conjunction with R. Monte-Carlo.
ADDR: Rue de la Poste 5, P.O. Box 141, Monte Carlo. **Cable:** Votan. **Te:** 30 22 33 – **L.P:** Pres: Paul E. Freed Ph.D, Dir. Gen: Ralph Freed D.D. Dir. Radio: B.L. Armstrong, M.A.B.D.
STATIONS: 2×100kW.

kc	m	kc	m	kc	m	kc	m
5960	50.34	7260	41.32	9630	31.15	11765	25.50

FOREIGN SERVICE:
Arabic: Mon–Fri 18.10–18.25 on 9630kc – **Armenian:** Sat/Sun 18.10–18.25 on 9630kc – **Bulgarian:** Sat 14.30–14.45 on 7260kc – **Czech:** Sun, Thurs, Sat 16.00–16.15 on 7260kc – **English:** 06.30–07.30(Sun 13.00) on 7260kc – **Estonian:** Sun, Tues, Fri 18.30–18.45 on 7260kc – **French:** 11.45–12.15 on 7260kc – **German:** 08.35–08.50 on 7260kc, 11.25–11.40 on 7260kc, 16.30–16.45 on 5960kc, 19.30–19.55 on 5960kc **Greek:** Sun 11.05–11.20, Wed 14.35–14.50 on 9630kc – **Hebrew:** 17.50–18.05 on 9630kc – **Hungarian:** 14.45–15.00 on 7260kc – **Italian:** 12.20–12.35 on 5690kc – **Latvian:** Mon, Wed, Thurs, Sat 18.30–18.45 on 7260kc – **Norwegian:** 17.00–17.30 on 7260kc – **Persian:** Sun 18.30–18.45 on 9630kc – **Polish:** Mon, Tues, Wed, Fri 16.00–16.15 on 7260kc

Portuguese: Sat 09.00–09.30 on 9630kc – **Rumanian:** Sun 10.20–10.50 on 7260kc – **Russian:** 15.20–15.55 on 9630kc – **Spanish:** 13.00–13.30 on 7260kc – **Ukrainian:** 15.05–15.20 on 9630kc – **Yugoslavian:** Sun 13.30–13.45, Wed 14.30–14.45 on 7260kc.
ANN: E: "This is Monte Carlo" or "You are listening to Monte Carlo" – "We invite our listeners in the British Isles to stay tuned for the following prgr's of Trans World Radio". F: "Ici Monte Carlo. Trans World Radio vous presente un programme en language Française". G: "Hier ist Monte Carlo, von Trans World Radio hören Sie ein Programm in deutscher Sprache". – **INT-SIG:** Musical Box.



V. by QSL-card. Records accepted.
F.PL: Station PJB, Trans World Radio Bonaire, began broadc. in August 1964 over a 500kW m-w tr. Located at 800kc this Caribbean st. transmits prgr's in English, Spanish, Portuguese, French and Dutch. A 50kW sw-tr. is broadc. to the Caribbean Area and the Americas. Another sw-tr of 260kW is being installed and is expected to be on-the-air by the end of 1964. This unit will transmit daily multilingual prgr's to a world-wide listening audience through a system of high-gain, directional antennas. Seven sw coverage antennas serve the following target areas:
1) *No. America*; 2) *So. America*; 3) Europe; 4) No. Africa; 5) *Ce. America, Caribbean.*

NORWAY

L.T: GMT+1 h (Su: 25/4–19/9: GMT+2 h) – **Pr.L:** Norwegian.
NORSK RIKSKRINGKASTING (Go.)
A non-comm. enterprise operated by an indep. State organization. **FI:** By license payments – **ADDR:** Bj. Björnsons Plass 1, Oslo. **Cable:** Studio, Oslo. **Te:** 463820. **Telex:** 1023 – **L.P:** Dir. Gen: Dr. Hans Jacob Ustvedt. Dep. Dir. Tec: E. Julsrud. Dep. Dir. Prgr: T. Elster. Dep. Dir. Adm: O. Granlund. Chief Secr: B. Kragem. Studio Contr: A. Klæbo. Prgr. Editors: H. Hegtum, Karl C. Lyche, H. Kiran, A. Feldborg. Dir. Music: K. Lange. Dir. Plays: H. Heiberg. Editor "*Programbladet*": E. Strand. Dir. sw. Dept: G. Nygaard. Press and Inf. Officer: A. O. Andersen.
Long- and Medium Waves:

	kc	m	kW		kc	m	kW
Tromsö	155	1935	10	Bö i Vesterålen	1115	269	1
Oslo	218	1376	200	Stavanger	1313	228	100
Röros	520	577	0.25	Geilo	1466	205	0.25
Vigra	629	477	100	Kautokeino	1466	205	1
Bodö	674	445	10	Narvik	1466	205	1
Finnmark	701	428	20	Porsgrunn	1466	205	0.25
Bergen I	890	337	20	Sandnessjöen	1466	205	0.25
Kristiansand	890	337	20	Svalbard	1466	205	1
Tröndelag	890	337	20	Brönnöysund	1484	202	0.25
Alta	1115	269	0.25	*Glomfjord*	1484	202	0.25
Arendal	1115	269	0.25	Karasjok	1484	202	1
Bergen II	1115	269	0.25	Mosjöen	1484	202	0.25
Lista	1115	269	1	Rjukan	1484	202	0.25
Mo i Rana	1115	269	0.04	Fredrikstad	1578	190	10
Namsos	1115	269	1	Nordkapp	1578	190	1.3
Notodden	1115	269	1				
Odda	1115	269	0.25				

FM	Mc	kW		Mc	kW		Mc	kW
Börve	87.6	0.02	Sogndal	91.5	30	Stord	96.0	60
Stryn	87.6	0.5	Kjelde-knatten	91.7	1	Mehamn	96.1	0.05
Hovde-fjell	87.8	25	Varanger	91.8	30	Hammer-fest	96.6	30
Gol	87.9	0.5	Grong	91.9	15	Sunndals-øra	96.8	0.05
Gulen	88.0	15	Hadsel	92.4	15	*Høyanger*	96.8	*0.01*
Hemmes	88.5	*15*	Melhus	92.4	60	Geilo	96.9	0.5
Oslo	88.65	50	Tana	92.5	30	Dale-kvam	96.9	0.04
Greipstad	88.8	11	Førde	92.8	15	Flå	96.9	0.03
Narvik	88.8	15	Voss	93.3	60	Årdal	97.1	0.01
Øre	89.1	30	Bokn	93.5	100	Hellesylt	97.5	0.008
Vega	89.3	25	Lesja	93.5	4	Fauske	97.6	1.3
Nord-fjord	89.4	15	Bremanger	93.6	15	Lyngdal	97.6	12
Alta	89.7	0.6	Gjøra	93.6	0.01	Tron	98.3	30
Tonstad	89.8	0.01	Skien	93.7	0.025	Bromma	98.5	0.07
Odda	90.0	0.01	Otta	94.0	0.05	Valldal	98.5	0.075
Steinkjer	90.0	12	Bjerkreim	94.2	60	Båtsfjord	98.7	0.02
Hasvik	90.1	3	Lom	94.9	0.05	Lakselv	99.2	1.3
Norheims	90.1	0.04	Rjukan	95.0	0.05	Geiranger	99.9	0.008
Steigen	90.3	*15*	Skafså	95.1	0.01			
Sauda	90.9	0.01	Berlevåg	95.8	0.02			
Kongs-berg	91.3	60	Velfjord	95.8	0.3			
			Hattfjell-dal	96.0	0.03			

Power Line distribution: Langerak 300kc 0.6kW, Bygland 290kc 0.25 kW, Oppdal 290kc 1kW, Röldal 285kc 1kW, Sand 300kc 1kW, *Sulitjelma 511kc 0.25kW*, Åndalsness 300kc 0.25kW, Åröy 300kc 0.6kW, Åseral 300kc 2kW, Tonstad 290kc 2kW.

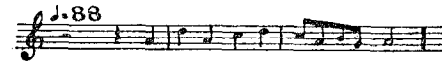
HOME SCE: W: 05.30–09.00, 10.20–13.30, 14.30–22.20. Sun: 06.50–15.00, 15.30–23.00. **N:** 05.40(W), 07.00(W), 08.00(Sun), 12.00, 15.05, 17.35, 21.10 – **Wrp:** 05.40(W), 07.00(W), 08.00(Sun), 12.00, 17.30, 21.00 **Folklore Music:** Sun 16.30 – **Rel:** Sun 10.00, Thurs 17.00, W 07.15 – **L.L: German:** Sun 07.00–07.15. **English:** Sun 07.15–07.40.

Bergen I (337m, Voss FM, Odda 205m, Aröy 1000m): Mon–Fri 15.10–15.30: Information.

Bergen II Local: D 16.00–17.30(Sun 1745.)

Samisk from Tromsö, Alta, Nordkapp, Finnmark: Tues 13.10–13.40. Sat 13.30–14.00. **Reg.prgr's** over all tr's W 13.00–13.30.

ANN: "Dette er Norsk Rikskringkasting". **In Samisk:** "Det la Norga Rikaradio, Tromsast. Di gullabetet Samgial programa" – **INT-SIG:**



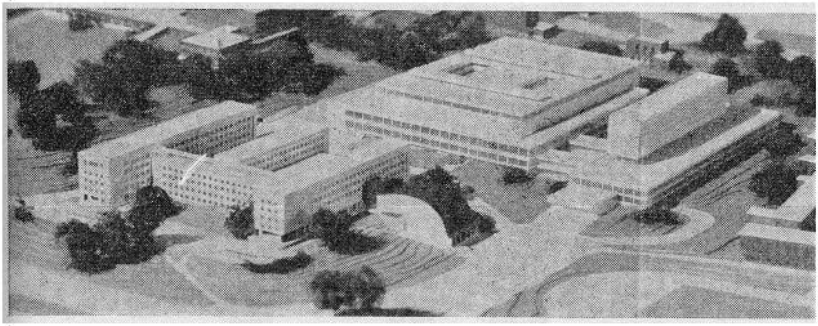
FOREIGN SERVICE
Tr's: Fredrikstad 120kW(2), 100kW(1), 10kW(2), 5kW(1, only 13mb), 3kW(1, only 11mb) – Freq's that may be used during the year:

Call	kc	m	Call	kc	m	Call	kc	m
LKF	1578	190.1	LLH	9645	31.10	LKW	17755	16.90
LKJ	6130	48.94	LKQ	11735	25.56	LLN	17825	16.83
LLI	6185	48.50	LLK	11850	25.32	LLP	21670	13.85
LLD	9550	31.41	LKV	15170	19.78	LLQ	21730	13.81
LLG	9610	31.22	LLM	15175	19.77	LLA	25900	11.58

Abbreviations: I) Far East/Japan/Pacific We./New Zealand/Ea. Australia – II) India/Indonesia/We. Australia – III) Near East/Ea. Africa/Madagascar – IV) Mediterranean/Ce. Africa/Antarctis – V) We. Africa/Mid- & So. Atlantic/So. America – VI) No. America/Caribbean – VII) Greenland/No. America We./Pacific Ea. – VIII) Spitzbergen/Alaska/Mid Pacific – 0) Europe, No. Sea area – a) For *Norwegians abroad (in Norwegian)*; b) "*Norway this Week*"; c) Weather at Sea (in Norwegian); d) Norwegian Home Sce; A) November/February; B) March/April.

Times	Prgr.	Area	Period	kc
03.00–04.30	c+a+b	VI, VII	A	°**6130, 6185, 9610**
			B	°**6130, 6185, 9610**
07.45–08.15	a	I, II, III	A	°6130, 9610, **11850, 17825**, 21730
			B	°6130, 9610, **15175, 17825**, 21730
10.25–10.35	c	V, VI	A	6185, **9610, 11850, 17825**
11.00–12.30	a+b	0, I, IV	A	°6130, **9610, 11850, 17825**, 21730
			B	°6130, **11850, 15175, 17825**, 21730
13.00–14.30	a+b	0, II, V	A, B	°9610, **11850, 15175, 17825**, 21730
14.50–15.00	c	V, VI	B	°6130, **11850,**
15.00–16.30	a+b	0, VI, VII	A, B	°**15175, 17825** 21730
17.00–18.30	a+b	III, IV, VIII	A	**6185, 9610, 11850** 15175, 21730
			B	°*6130, 6185*, **11850 15175, 17825**, 21730
19.00–20.30	a+b	0, IV, V, VI	A	°6130, 6185, 9610 **11850**
			B	°9610, **11850, 15175 17825**
21.00–22.30	d	0, IV, V, VI	A, B	°6130, **6185, 9610 11850**
23.00–00.30	c+a+b	0, V, VI	A	°**6130, 6185, 9610**
			B	°6130, **6185, 9610 11850**

° omnidirectional aerial. Freq's in fat types 100 or 120kW.
N. in Norwegian at the beginning of each tr. **N. in English:** Sun 12.00, 14.00, 16.00, 18.00, 20.00, 24.00; Mon 03.00.
The prgr's in English "Norway this Week" is heard only Sun (local time) as the last half h of prgr. b.
In periode A Tromsø sw-tr carries the Norwegian Home Sce on 7210kc except at 10.25–13.30, when 9550kc is used. In periode B on 11735kc throughout.
Prgr. for Norwegians abroad: Sun: Rel. Sce, Sport, L.N. – Mon: Sport N, Parliament N – Tues: Actualities, L.N. – Wed: Request Prgr. (music), L.N – Thurs: World N, L.N – Fri: Missionary N, L.N – Sat: Letter Box, L.N.

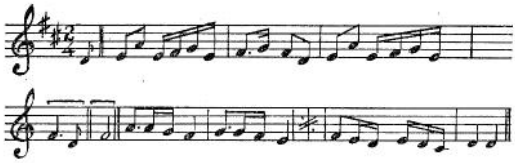


Model of the existing Broadcasting House (in the foreground) and the new Television House, now under construction (in the background)

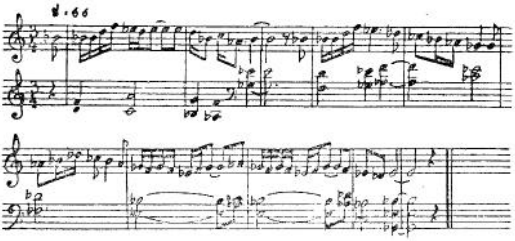
NORSK RIKSKRINGKASTING

(THE NORWEGIAN BROADCASTING CORPORATION)

ANN: "This is Radio Norway with its shortwave service for Norwegians abroad".
INT-SIG: Every s.w. transmission is introduced by the following theme, which originates from an ancient folk tune from Hallingdal.



Five minutes previous to every s.w. tr. the following signal is sent:



Message to our English-speaking audience: In our daily prgr's for Norwegians abroad we will usually have a section of Norwegian music or music presented by Norwegian artists. This musical section, which lasts 15 to 20 minutes, is introduced in English as well as in **Norwegian.** On Wed and Sat you can listen to our **"Letter Box Programme"**, in which we play our listener's request records. We often receive letters from listeners in Norway with request to play a record with a greeting to one of their relatives abroad, but we regret to be unable to comply with these requests. Every Sunday we have an additional prgr. in English, **"Norway this week"**, in which we try to present Norway in different ways through music and feature prgrs. We are very grateful for comments on our transmission. Reports are answered by QSL-card. Return postage is not necessary. Our postal address is: **Radio Norway**, Oslo, Norway.
PUB: Programbladet (weekly), Prgr.schedule free on request.

The Marconi Company Ltd. G. B. delivered: Oslo 2×100kW, 1×2 kW, 1×1¼kW. Stavanger 11×5kW, 5×900W, 1×10W tr's.
AKG, Austria, delivered studio equip. (microphones).
Telefunken AG, Germany: studio equip. (recorders).
Wilh Franz KG, Germany: EMT studio equip.

TELEVISION

NORSK RIKSKRINGKASTING (Go.)
FI: By license payments – **ADDR:** See Radio. **Telex:** 1794 – **L.P:** Dir. Gen: Dr. H.J. Ustvedt. Dep. Dir. Adm: O. Granlund. Dep. Dir. Tec: T. Navelsaker. Dep. Dir. Prgr: O. Nes.

STATIONS: ch E, Po, H:

Stations	ch	kW (ERP)
Greipstad	2	15
Melhus	2	100
Gulen	2	8
Kjeldeknatten	3	0.15
Gamlesnsveten	3	30
Bremanger	4	30
Kongsberg	4	100
Bjerheimsbygd	5	0.048
Erfjord I	5	0.005
Lier	5	0.003
Nordhue	5	60
Orkdal	5	0.11
Haus	6	0.032
Oslo	6	100
Øre	6	60
Dalekvam	7	0.006
Erfjord II	7	0.01
Hovdefjell	7	30
Kyrksæterøra	7	0.045
Laksevåg	7	0.05
Bokn	8	15
Hjelle	8	0.024
Porsgrunn	8	0.002
Ålesund	8	0.01
Bergen	9	140
Drammen	9	0.001
Gjøvik	9	0.018
Halden	9	0.01
Kongsvinger	9	0.004
Larvik	9	0.002
Notodden	9	0.01
Skafså	9	0.01
Tron	9	30
Lillehammer	10	1
Varingskollen	10	0.03
Sandefjord	10	0.002
Furuset	11	0.048
Hamar	11	0.006
Rjukan	11	0.04
Skien	11	0.01
Sunndalsøra	11	0.064
Tønsberg	11	0.0002
Lysefjord	11	0.64
Oppdal	11	0.09
Voss	11	0.5

D.PRGR: Testpicture W 09.30–15.00. Prgrs: D 18.30–20.00.

The Marconi Company Ltd. G.B, delivered: Stavanger 2×4kW, 2×1kW, 1×3kW, 1 amplifier 50W – Brown Boveri, Switzerland, delivered: Jonsknuten 10/2kW, Vassfjellet 10/2kW, Nordhue 10/2kW, Gamlemsveten 10/2kW, Bremanger 10/2kW – AKG, Austria, delivered: studio equip. (recorders, microphones).

NOREA RADIO (Nordic Radio Evangelistic Association)
FI: By gifts from listeners and friends – **ADDR:** Grensen 19, Oslo. **Cable:** Norskluth. **Te:** 417640 - **L.P:** Dir. Adm. & Prgr: A. Newland. Dir. Tec: A. Wangberg –**D.PRGR:** Norwegian 17.00–17.30 on 5960, 7260 or 9620kc 100kW over R. Monte-Carlo – **V.** by QSL-card or letter

POLAND (People's Rep. of)

L.T: GMT+1 h (Summer: GMT+2 h) – **Pr.L:** Polish.
POLSKIE RADIO I TELEWIZJA (Go.)
FI: By license payments – **Fee:** 180 zlotys – **AD:** 7% of broadc. time – **ADDR:** Komitet do Spraw Radio i Telewizji "Polskie Radio i Telewizja" ul. Noakowskiego 20, Warsaw. **Cable:** "Polskieradio" – **Te:** 2106.
L.P: Pres: W. Sokorski. Vice Pres, Home Sce: H. Werner, Vice Pres. Foreign Sce: E. Uzdanski. Vice Pres, Engineering: K. Kozlowski. Dir. Prgr. Home Sce: O. Stampfl. Dir. Prgr. Foreign Sce: H. Meller. Vice Pres. for TV: A. Walatek. Dir. Adm: A. Landau. Secr. Gen: H. Cendrowski. Dir. Music: R. Jasinski. Dir. Tec: B. Klimaszewski. Head Intern. Relations Office: Mme J. Kowalikowa.

HOME SCE:	kc	m	kW		kc	m	kW
Warszawa I	227	1322	500	Lublin	1367	219.8	60
Poznan	737	407	300	Lódz	1484	202.2	8
Warszawa II	818	367	300	Kielce	1484	202.2	1
Katowice	1079	278	60	Olsztyn	1484	202.2	1
Krakow	1205	249	60	Zakopane	1484	202.2	2
Rzescow	1205	249	60	Szczecinek	1484	202.2	2
Wroclaw	1259	238.5	50	Slupsk	1484	202.2	2
Zielona Gora	1259	238.5	30	Jelenia Góra	1484	202.2	1
Gdansk	1304	230	30	Opole	1594	188.2	1
Szczecin	1304	230	160	Koszalin	1594	188.2	1
Bialystok	1367	219.8	60	Gizycko	1594	188.2	1
Lódz II	1367	219.8	50				

FM: Warszawa III 97.6Mc 10kW 69.2Mc 2kW – Katowice 89.8Mc 3kW 65.9Mc 2kW 68.3Mc 2kW – Opole 95.0Mc 3kW – Gdánsk 70.3Mc 5kW – Bydgoszcz 71Mc 5kW, 68.9Mc 5kW – Zgorzelec 68.2Mc 0.3kW.
Prgr. I 227kc: W 03.57–22.10(Sat 22.40). Sun 04.30–23.40.
N: 04.00(W), 05.00, 06.00, 07.00, 08.00(Sun), 11.04, 14.00, 16.00, 19.00, 22.00 – **Folk Music:** W 11.45–12.00 – **Chopin Concert:** Wed 20.00–20.30 – **The Polish Radio Symphony Orchestra (WOSPR) Concert:** Mon 20.00–22.00 – **L.L: English:** Mon, Thurs 17.30–17.45. **French:** Wed, Sat 17.30–17.45. **Russian:** Tues, Fri 17.30–17.45.
Prgr. II 818kc: W 04.25–23.00(Sat 01.00). Sun 05.00–23.00.
N: 04.30(W), 05.30, 06.30, 07.30, 11.04, 15.00(W), 16.00(Sun), 20.00, 22.50 – **Chopin Concert:** Sun 15.30–16.00 – **National Philharmonic Concerts:** Fri 18.30 – **Symphonic Concert:** Sun 11.10 – **L.L: English:** Tues, Fri 08.45–09.00. **French:** Thurs, Sun 08.45–09.00. **Russian:** Wed, Sat 08.45–09.00.
Prgr. III 97.6Mc: D 18.30–22.00.

FOREIGN SERVICE: 5/100kW, 1.w. 500kW:

kc	m	kc	m	kc	m	kc	m
227	1322	5950	50.42	7145	41.99	9675	31.01
1079	278.0	6005	49.96	7285	41.18	11840	25.34
1304	230.0	6135	48.90	9525	31.50	11955	25.09
1502	199.7	7125	42.11	9540	31.45	15120	19.84

16/10 64 – 15/4 65

TO EUROPE

Danish:
16.30–17.00 6135, 7125
20.30–21.00 6135, 7125, 9540, 1502

English:
18.30–19.00 6135, 7125
19.30–20.00 6135, 7125
20.30–21.00 5950, 7145
21.30–22.00 6135, 7125
22.30–23.00 5950, 9540, 1502

Finnish:
16.00–16.30 6135, 7125
19.00–19.30 6135, 7125

French:
11.00–11.15 7285, 9540, 9675, 11955
16.30–17.00 7285, 9675
17.30–18.00 7285, 9540, 9675, 1502
20.00–20.30 5950, 7145
21.30–22.00 5950, 7145
22.00–22.30 5950, 9540, 1502

German:
11.30–12.00 6135, 7125, 7145, 1502
17.00–17.30 5950, 7145, 9540, 1502
18.30–19.00 5950, 7145, 9540, 1502
19.30–20.00 5950, 7145
21.00–21.30 5950, 7145

Italian:
11.15–11.45 7285, 9540, 9675, 11955
17.00–17.30 6135, 7125
18.00–18.30 7285, 9540, 9675, 1502
20.00–20.30 7285, 9675
21.00–21.30 6005, 6135, 7125 7285, 9540, 1502,

Polish:
05.00–06.30 6005, 6135, 7125, 7285, 9525, 1502
06.30–07.00 6005, 6135, 7285, 9525
12.30–13.30 9540, 9675, 11955
15.00–15.30 5950, 6135, 7125, 7145, 7285, 9540, 9675, 1502
16.00–16.30 5950, 7145
16.30–17.00 5950, 7145, 9540, 1502
17.30–18.00 5950, 7145
18.00–18.30 5950, 6135, 7125, 7145
19.00–19.30 5950, 7145
22.45–23.15 227 (Mon–Fri)
23.15–23.45 227 (Sat, Sun)
23.15–23.45 1304, 1079

Spanish:
17.00–17.30 7285, 9675
20.30–20.57 7285, 9675
23.00–23.30 5950, 7125, 1502

Swedish:
17.30–18.00 6135, 7125
20.00–20.30 6135, 7125
21.30–22.00 9540, 1502
22.15–22.45 227 (Mon–Fri)
22.45–23.15 227 (Sat, Sun)

Esperanto:
15.30–16.00 5950, 6135, 7125, 7145, 7285, 9540, 9675, 1502

Concerts:
*06.30–07.00 7135, 1502
12.30–14.00 7285, 1502
*16.00–16.30 9540, 1502
19.00–20.30 9540, 1502
23.30–01.00 5950, 7125, 1502
* Chopin Concert.

OVERSEAS SCE.
TO AUSTRALIA/ NEW ZEALAND

English:
07.30–08.00 9675, 11840, 15120
08.30–09.00 9675, 11840, 15120

Polish:
07.00–07.30 9675, 11840, 15120
08.00–08.30 9675, 11840, 15120

TO AFRICA

English:
12.00–12.30 7125, 11840, 15120
13.00–13.30 7125, 11840, 15120
19.00–19.30 7285, 9675
22.00–22.30 6005, 7125, 7145, 7285, 11840

French:
12.30–13.00 7125, 11840, 15120
13.30–14.00 7125, 11840, 15120
18.30–19.00 7285, 9675
22.30–23.00 6005, 7125, 7145, 7285, 11840

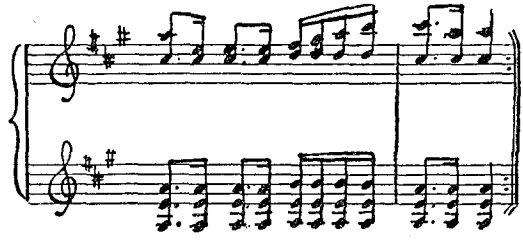
TO SOUTH AMERICA

Polish:
23.00–23.30 9675, 11840, 15120
23.30–24.00 9675, 11840, 15120
00.30–01.00 9675, 11840, 15120
01.00–01.30 9675, 11840, 15120

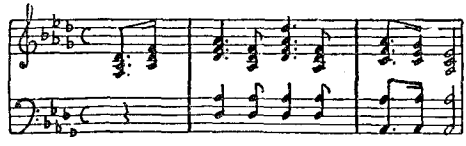
Spanish:
00.00–00.30 9675, 11840, 15120
01.30–02.00 9675, 11840, 15120

For Seamen (Polish):
*02.45–04.45 5950, 6005, 9540, 1502
**02.45–04.45 7125, 11840, 15120
*14.00–14.55 6005, 9540, 11955, 1502
**14.00–14.55 7125, 11840, 15120
* for North Sea; ** for Bay of Guinea.

DX-PRGR: English: 2nd Fri of the month 18.30 and following Mon 21.30. **Swedish:** Thurs 17.30, 21.30. **Danish:** Wed 16.30, 19.30 (fortnightly).
ANN: Home Sce: "This is Polskie Radio Warsaw" (or another station when local programme) – "Tu Polskie Radio Warszawa". – **Foreign Sce: E:** "This is Warsaw calling" – **Polish:** "Mówi Warszawa" – **F:** "Ici Varsovie etc" – **G:** "Hier spricht Warszawa" – **Sp:** "Habla Radio Varsovia" – **I:** "Qui Radio Varsavia" – **Danish:** "Her er Warszawa" – **Swedish:** "Här är Polens Radio Warszawa".
INT-SIG: Home Sce: Warsaw National, Warsaw I:



Warsaw II: *First movement of Polonaise in A flat major by Chopin.*



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For details, write:
World Radio TV Handbook Co. Ltd.
Sundvej 6, Hellerup, Denmark.

RADIO PORTUGAL

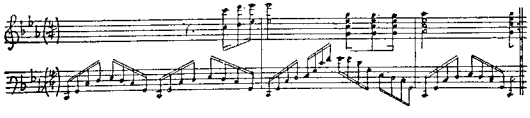
The Voice of the West

Daily programmes in.

English
French
Spanish
Italian
German
and
Concanin

ic

Foreign Sce: Revolutionary Etude by Chopin. – **V.** by QSL-card.

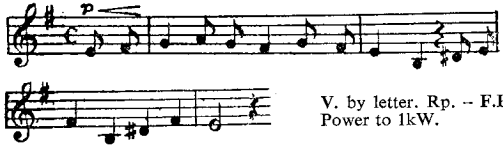


V. by QSL-card and letter. Re. to Polskie Radio. Al Niepodleglosci 75/77, Warsaw – **PUB:** "Radio i Telewizja" (weekly), Polish Radio and Television Bulletin (monthly).

POLISH PATHFINDERS STATION (Operated by the Polish Pathfinders Union).
ADDR: Konopnickiej 6, Warszawa – **L.P:** Dir. Gen: J. Grygolunas.
STATIONS: I)=May/June/Sept/Oct. II)=July/August (during August on Sun only).

kc	kW		
6850	0.35	I: 09.00–11.00, 14.00–16.00;	II: 13.00–18.00
7125	15	I: 09.00–11.00, 14.00–15.00;	II: 14.00–15.00
7306	0.45	I: 09.00–11.00, 14.00–16.00;	II: 13.00–18.00

ANN: "Tu Rozglosnia Harcerska" ("Here is a Polish Pathfinders Union Radiostation") – **INT-SIG:**



V. by letter. **Rp.** – **F.PL:** Power to 1kW.

PORTUGAL

L.T: GMT (GMT+1 h from 1st. Sun in April to 1st. Sun in October) – **Pr.L:** Portuguese.

EMISSORA NACIONAL DE RADIODIFUSÃO (Go.)
ADDR: Rua do Quelhas 2, Lisboa. **Cable:** "Emissora-Lisboa". **Te:** 660181 PBX – Emissor Regional do Norte: Rua Cândido dos Reis, Porto – Emissor Regional de Coimbra, Faro, Guarda, Portalegre, Elvas, Covilhã, Viseu, Lousã e Monchique – Emissor Regional dos Açores, Ponta Delgada, Açores – **L.P:** Dir. Gen. Dr. S. Allegro. Dir. Tec: Eng. M. Bivar. Dir. Adm: Dr. C. Rogeiro. Dir. Prgr: Eng. J. da Silva Dias. Internat. Sec: Dra. M.P. de Barros Santos. External Rel: Dra. V. de Carvalho.

HOME SERVICE

STATIONS:	Call	kc	m	kW	h. of tr.
Lisboa I	CSA3	665	451.1	135	07.00–01.00(Sat 02.00)
Lisboa II	CSA2	755	397.3	135	12.00–17.00, 18.00–01.00.
Norte I	CSA4	719	417	25	as Lisbon I
Norte II	CSA201	1061	283	25	as Lisbon II
Porto	CSA215	1367	219	10	as Lisbon I
Coimbra	CSA210	1448	207	1	as Lisbon I
Faro	CSA218	557	539	1	as Lisbon I
Guarda	CSA218	557	539	1	as Lisbon I
Covilhã	CSA214	1562	192.1	1	as Lisbon I
Viseu	CSA216	1358	220.9	1	as Lisbon I
Portalegre	CSA213	1484	202.2	0.1	as Lisbon I
Elvas	CSA212	1358	220.9	0.1	as Lisbon I

Short Waves (to Atlantic):

Lisboa	CSA95	11925	25.16	10	09.00–21.00
Lisboa	CSA52	6025	49.79	10	21.00–24.00
Ponta Delgada (Acores)	CSA97	4865	61.66	1	14.00–15.00, 20.00–24.00

FM: Lisboa I CSA61 95.7Mc 12kW – Porto CSA88 96.7Mc 22kW – Lousã I CSA82 87.9Mc 40kW – Monchique I CSA85 88.9Mc 2.5kW – Guarda I CSA87 94.7Mc 0.5kW – Lisboa II CSA84 94.3Mc 12kW – Porto II CSA81 92.5Mc 22kW – Lousã II CSA83 89.3Mc 22kW – Monchique II CSA86 91.5Mc 2.5kW.

NEWS: Netw. I: 07.05, 08.00, 09.00, 11.00, 12.00, 13.00, 15.00, 16.30, 18.00, 20.30, 22.30, 00.45 – Netw. II: 13.00, 19.00, 23.30, 00.45, **ANN:** "Emissora Nacional, a transmitir com...(regional tr's)".

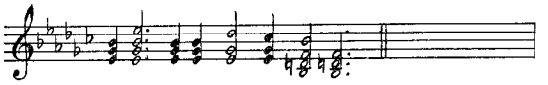
OVERSEAS SERVICE (in Portuguese)
Short Waves: 50/100kW. All st's located at S. Gabriel – studios n Lisboa. All tr's directional. Call: CSA—.

Call	kc	m	Call	kc	m	Call	kc	m
52	6025	49.79	27	9740	30.80	43	17740	16.92
29	6185	48.50	31	11840	25.34	45	17880	16.78
55	7130	42.08	72	11935	25.14	66	17895	16.76
23	9635	31.14	64	15125	19.83	67	21495	13.96
56	9645	31.10	42	15380	19.50	49	21700	13.83

Remark: Powers indicated are the power at carrier level.
Areas: I) Timor, II) Macau, III) Goa (Portuguese India), IV) S. Tomé/Angola/Mozambique, V) Guinea/Cape Verde/Brazil, VI) U.S.A./Canada/Portuguese Fishing Fleet, VII) U.S.A./Canada.

H. of tr.	Area	Nov/Feb (kc)	March/April (kc)
09.00–13.30	I	21495, 17880	21495, 17880
09.00–13.30	II	17880, 15125	17880, 15125
15.15–17.15	III	17845, 15380	21495, 17895, 15380
09.00–13.30*	IV	21700, 17740, 15125	21700, 17740, 15125
17.15–23.30*	IV	15125, 11935, 9645 7130	15125, 11935, 9645, 7130
14.15–17.00	V	21700, 17880, 15125	21700, 17880, 15125
20.00–02.00	V	15125, 11840, 9635	15125, 11840, 9635
00.00–02.00	VI	9740, 6185, 6025	9740, 6185, 6025
02.45–03.45	VII	9740, 6185, 6025	9740, 6185, 6025

* Sun 09.00–23.30 – **N:** 00.15, 02.45, 09.30, 10.30, 11.30, 13.00, 14.20 (Sun), 15.00, 15.30, 16.30, 17.30, 18.30, 19.30, 20.30, 22.00.
ANN: "Aqui Lisboa, Serviço Ultramarino da Emissora Nacional" – **INT-SIG:** T.S. and National Anthem.



V. by QSL-card. Records accepted – **PUB:** "Rádio e Televisão" (weekly).

INTERNATIONAL SERVICE ("The Voice of the West")
Medium Waves

H of tr	L.	Area	Nov/April (kc)
22.00–22.45	French	Europe	755, 1061
22.45–23.30	English	Europe	755, 1061
23.30–00.15	German	Europe	755, 1061

N: French 22.00, English 22.45, German 23.30.
Short Waves

H of tr.	L.	Area	Nov/April (kc)
13.45–14.30	English	So. Ea. Asia	17895, 15380
14.30–15.15	Konkani	So. Ea. Asia	17895, 15380
17.15–18.00	French	Europe	6025
18.00–18.45	English	Europe	6025
18.45–19.30	Italian	Europe	6025
18.00–19.15	English	We. Africa	15380
18.00–19.15	English	We. Africa	15380
18.00–19.15	English	Ea. Africa	17740, 11935, 9645
19.15–20.00	French	Africa	15380
02.00–02.45	Spanish	So. America	11840, 9635
02.00–02.45	English	U.S.A.(Atlantic)	9740, 6185, 6025
03.45–04.30	English	U.S.A.(Pacific)	9740, 6185, 6025

N: English: 14.15, 18.00, 02.00, 03.45. **French:** 17.15, 19.15. **Italian:** 18.45. **Spanish:** 02.00. **Konkani:** 14.45.
DX-Prgr (in English): Every second Fri and Mon: Fri 18.15, 23.00, Mon 02.15, 04.15.
ANN: E: "This is the Voice of the West speaking to you from Lisbon, Portugal". F: "Ici la voix de l'Occident qui vous parle de Lisbonne, Portugal". Sp: "Esta es la Voz del Occidente que habla desde Lisboa, Portugal". I: "Queste é la Voce dell'Occidente che vi parla da Lisbonna, Portogallo". G: "Hier ist Die Stimme des Westens aus Lissabon im Portugal". Konkani: "Lisboa xarantio Radio".
INT-SIG: Signature tune of foreign language broadc. is the opening bars of the Fifth Symphony by Beethoven. Closes with National Anthem – V. by special QSL-card. Records accepted – **PUB:** R. Portugal Listeners Magazine, monthly, free of charge.

Brown Boveri & Co. Switzerland: 2×135kW, 2×25kW mw-tr's, 1×100kW sw-tr – RCA, USA: 1×10kW mw-tr – GE, USA: 1×1kW mw-tr, 2×100kW sw-tr's – Collins, USA: 4×1kW mw-tr's – Westinghouse, USA: 1×40kW, 2×12kW FM tr's – Philips, Holland: 3×22 kW FM-tr's – Rhode & Schwarz, Germany: 2×2.5kW FM-tr's – Redifon, G.B: 1×0.5kW FM-tr.
Will. Franz KG, germany: EMT studio equip.

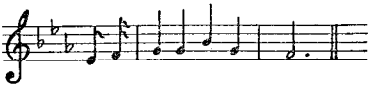
R. UNIVERSIDADE (Go. – Ministry of Nat. Education)
ADDR: R. D. Estefania 14, Lisboa 1. **Te:** 41884 – **L.P:** Dir: Dr. A. R. Gonçalves Pereira. Tec. Asst: V. Felix.
HOME SCE: Cultural and informative prgrs. mainly: W 17.00–17.55. Sun 10.00–12.55 on 755kc (Lisboa II).
ANN: "R. Universidade, estudios do Centro Universitario de Lisboa da Mocidade Portuguesa, a transmitir por intermedio da Estaçao Lisboa 2 da Emissora Nacional" – **INT-SIG:** Opens with "Gaudeamus Igitur" and closes with the "Marcha da Mocidade Portuguesa" – V. by QSL-card. Records accepted – **F.PL:** FM tr's in Lisboa, Coimbra, Porto – **PUB:** monthly bulletin free.

RADIO RENASCENCA (Rlg. Catholic)
ADDR: Emissora Catolica Portuguesa, Rua Capelo 5, 2°, Lisboa.
STATIONS: Lisboa CSB3 1286kc 233m 2kW – CSB2 6155kc 48.74m 3kW – Porto CSB30 1169kc 256m 10kW.
HOME SCE: 07.00–02.00 – **N:** 08.25, 12.45, 20.30.
ANN: "R. Renascenca–Emissora Catolica Portuguesa" – **INT-SIG:** Gong. Prgr's open with a religious choir – V. by QSL-card.

R. CLUBE PORTUGUES (Comm. Sociedade Anónima Cooperativa de Responsabilidade Lda.)
AD: 15% of broadc. time – **ADDR:** Central Office: Rua Sampaio e Pina 26, Lisboa 1. **Cable:** Radioclube. **Te:** 682071. **Telex:** 596 No. **Branch:** Delegaçao do Norte, Rua de Ceuta 53, Porto. **Te:** 23863. **Telex:** 0742 – **L.P:** Gen. Mgr: A. Lima Basto. Tec. Dir: M. Menezes. Dir. Prgr: A. Jorge. Comm. Dir: J. B. Moniz. **No. Branch:** H. Schreck.

STATIONS		kc	m	kW	h of tr.
Miramar	CSB9	782	383.6	100	07.00–01.30
Parede	CSB2	1034	290.1	25	00.00–24.00
Parede	CSB51	6080	49.34	10	00.00–24.00

FM: Lisboa CSB55 97.4Mc 3kW: 08.00–01.00 – Porto CSB29 97.7Mc 1kW: as CSB9.
N: 00.45, 01.45, 02.45, 06.45, 08.45, 10.45, 12.45, 17.45, 19.45, 21.00, 23.45.
ANN: Parede: "R. Clube Portugues transmitting with its st's of medium and short wave from Parede" – Miramar: "R. Clube Portugues transmitting with its st. of medium wave from Miramar" – **INT-SIG:** Gong – V. by QSL-card. Records accepted.



EMISSORES ASSOCIADOS DE LISBOA (Comm.)
FI: Priv. (4 partners) – **AD:** 15×broadc. time – **ADDR:** Rua de Campolide 27, 6°D°, Lisboa 1. **Te:** 683450. **Studios:** R. Voz de Lisboa: Av. Infante Santo 53, Lisboa 3. Clube Radiofónico de Portugal: R. Carlos Mardel 5, Lisboa 1. R. Graça: R. Verónica 126, Lisboa 2. R. Peninsular: R. Fialho Almeida 3, Lisboa 1 – **L.P:** Consulting Eng: C. Barradas da Silva. Tec. Dir: A. Laranjeira. Dir. Adm: A. Santos. Public Rel: C. Flor.
STATIONS: CSB4 1594kc 188m 10kW – **FM:** CSB266 99.4Mc 1kW
HOME SCE: D 07.00–02.00. **N:** 12.20, 20.30 – **ANN:** "CSB4, Estação de Emissoras Associados de Lisboa" – **INT-SIG:** String chords (guitar) – V. by QSL-card.

EMISSORES DO NORTE REUNIDOS (Comm.)
ADDR: R.D. Joao IV 960, Porto. **Te:** 30781 – **L.P:** Dir: A. Rodrigues. Dir. Tec: F. Grilo
STATIONS: * System: Collins; ** System: RCA
CSB5 * 1578kc 190.7m 10kW – **FM:** ** 91.3Mc 1kW.
HOME SCE: 07.00–02.00. **N.** 13.00, 23.45 – **ANN:** "Aqui Porto Emissores do Norte Reunidos a transmitir..." – V. by QSL-card or letter. – Records accepted.

RADIO RIBATEJO (Comm.)
FI: By adv – **ADDR:** Av. 5 de Outubro, 34, Santarém. **Te:** 363 – **L.P:** Dir. Gen: J. Varela Santos. Dir. Tec: A.V. Santos.
STATION: 1322kc 226.9m 0.5kW.
HOME SCE: 10.00–14.00, 18.00–20.00 (Sun 10.00–20.00). **N.** 13.45.
INT-SIG: Gong – V. by QSL-card. Records accepted. Re. in P, Sp, F, E.

RUMANIA (Peoples Rep.)

L,T: GMT+2 h – Pr.L: Rumanian.

RADIODIFUZIUNEA TELEVIZIUNEA ROMINA (Go.)
AD: Allowed in special cases. 35 mins per day – **ADDR:** P.O.B. 111, Bucuresti. **Cable:** Radioteleviziunea. **Te:** 13.46.10. **Telex:** 251 – **L.P:** Pres: Ion Pas. Vice Pres: S. Brucan, C. Prisnea, G. Ionescu, I. Topor. Head For. Rel: D. Natu.

STATIONS:

Name	kc	m	kW	Name	kc	m	kW
Brasov	155	1935	150	Cluij	1151	260.9	50
Bucuresti	557	538.6	4	Constanza	1315	228.0	2
Timisoara II	628	477	30	Baia Mare	1428	210.5	2
Timisoara I	755	397.3	130	Craiova	1457	205.9	20
Bucuresti I	854	151.3	150	Brasov	1484	202.2	2
Miercurea	908	330.0	7	Sibiu	1484	202.2	2
Iasi	1052	285.3	50	Tg. Mures	1484	202.2	2
Oradea	1124	266.9	7				

RADIO NACIONAL DE ESPAÑA

HABLA PARA EL MUNDO HORAS EN GMT

En chino:	De 11.45 a 12.15 por 9360 kc
En árabe:	Por 9360 kc: De 15.30 a 15.58, de 16.00 a 16.28, 16.30 a 16.58 y 17.00 a 17.28
En árabe/ frances:	Para Marruecos por 6130 kc De 13.30 a 14.30 y 18.15 a 19.15 De 23.00 a 24.00
En ucraniano:	De 16.25 a 16.40 y 05.30 a 05.45 por 6140/9615 kc
En checo:	De 16.40 a 16.55 y 05.45 a 06.00 por 6140/9615 kc
En croata:	De 17.15 a 17.30 y 06.20 a 06.35 por 6140/9615 kc
En leton:	De 16.55 a 17.15 y 06.00 a 06.20 por 6140/9615 kc
En ruso:	De 17.30 a 18.00 y 06.35 a 07.05 por 6140/9615 kc De 07.00 a 07.30, 11.00 a 11.30 y 19.00 a 19.30 por 9360/9615 kc
En bieloruso:	De 17.30 a 17.50 por 9360 kc De 19.40 a 20.00 por 9360 kc
En estoniano:	De 18.00 a 18.20 y 07.05 a 07.25 por 6140/9615 kc
En bulgaro:	De 18.20 a 18.35 y 07.25 a 07.40 por 6140/9615 kc
En lituano:	De 18.35 a 18.55 y 07.40 a 08.00 por 6140/9615 kc
En eslovaco:	De 18.55 a 19.10 y 08.00 a 08.15 por 6140/9615 kc
En hungaro:	De 19.10 a 19.30 y 08.15 a 08.35 por 6140/9615 kc
En rumano:	De 19.30 a 19.50 y 08.35 a 08.55 por 6140/9615 kc
En polaco:	De 19.50 a 20.20 y 08.55 a 09.25 por 6140/9615 kc
En albanes:	De 17.50 a 18.05 por 9360 kc De 20.00 a 20.15 por 9360 kc
En inglés:	(Para Inglaterra): De 20.20 a 20.50 por 9360 kc – (EE.UU. Costa Atlantica): De 01.00 a 01.45 por 6130 y 9615 kc – (EE.UU. Costa Pacifico): De 02.00 a 02.45 por 6130 y 9615 kc (EE.UU. General para los Estados): De 03.00 a 03.45 por 6130 y 9615 kc
En francés:	De 20.50 a 21.20 horas, por 9360 kc
En alemán:	De 21.20 a 21.40 horas, por 7105 y 9360 kc
En italiano:	De 21.40 a 22.00 horas, por 7105 y 9306 kc
En portugués.	(Para Brasil): De 22.15 a 22.45 por 6140 y 9360 kc
En español:	(Para españoles residentes en el extranjero): De 16.25 a 21.20 por 6140/7105/9695 kc (Para Hispanoamérica): De 23.00-05.00 por 6140/9360/9640/11800 kc. (Para Filipinos): De 11.15 a 12.15 por 15420 kc Para Misioneros en Oriente: De 12.15 a 12.30 (jueves 13.00) por 9360 kc Para Fernando Póo y Rio Muni: De 19.45 a 22.45 por 9370 kc

Treinta y cuartro servicos informativos, en veintidos idiomas llevan asi a todos los paises LA VOZ DE ESPAÑA.

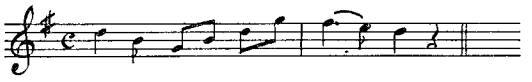
RADIO NACIONAL DE ESPAÑA

SPEAKS TO THE WORLD TIMES IN GMT

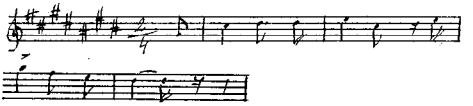
In Chinese:	From 11.45 to 12.15 on 9360 kc
In Arabic:	On 9360 kc: 15.30–15.58, 16.00–16.28, 16.30–16.58, 17.00–17.28
In Arabic/French	to Morocco on 6130 kc: 13.30–14.30, 18.15–19.15, 23.00–24.00
In Ukrainian:	16.25–16.40, 05.30–05.45 on 6140/9615 kc
In Czech:	16.40–16.55, 05.45–06.00 on 6140/9615 kc
In Croatian:	17.15–17.30, 06.20–06.35 on 6140/9615 kc
In Latvian:	16.55–17.15, 06.00–06.20 on 6140/9615 kc
In Russian:	17.30–18.00, 06.35–07.05 on 6140/9615 kc 07.00–07.30, 11.00–11.30, 19.00–19.30 on 9360/9615 kc
In Bielorussian:	17.30–17.50 on 9360 kc 19.40–20.00 on 9360 kc
In Estonian:	18.00–18.20, 07.05–07.25 on 6140/9615 kc From 14.15 to 14.30 on 7105 kc From 18.00 to 18.20 on 9615 kc
In Bulgarian:	18.20–18.35, 07.25–07.40 on 6140/9615 kc
In Lithuanian:	18.35–18.55, 07.40–08.00 on 6140/9615 kc
In Slovak:	18.55–19.10, 08.00–08.15 on 6140/9615 kc
In Hungarian:	19.10–19.30, 08.15–08.35 on 6140/9615 kc
In Rumanian:	19.30–19.50, 08.35–08.55 on 6140/9615 kc
In Polish:	19.50–20.20, 08.55–09.25 on 6140/9615 kc
In Albanian:	17.50–18.05 on 9360 kc 20.00–20.15 on 9360 kc
In English:	To Gt. Britain: 20.20–20.50 on 9360 kc – To USA, Atlantic Coast: 01.00–01.45 on 6130/9615 kc – To USA, Pacific Coast: 02.00–02.45 on 6130/9615 kc – To USA (General): 03.00–03.45 on 6130/9615 kc
In French:	20.50–21.20 on 9360 kc
In German:	21.20–21.40 on 7105/9360 kc
In Italian:	21.40–22.00 on 7105/9360 kc
In Portuguese:	To Brazil: 22.15–22.45 on 6140/9360 kc
In Spanish:	To Spaniards living abroad: 16.25–21.20 on 6140/7105/9695 kc – To Latin America: 23.00–05.00 on 6140/9360/9640/11800 kc – To Philippines: 11.15–12.15 on 15420 kc – To Missionaries in the East: 12.15–12.30 (Thurs 13.00) on 9360 kc – To Fernando Po and Rio Muni: 19.45–22.45 on 9370 kc.

THE VOICE OF SPAIN brings thirtyfour informatory broadcasts in twentytwo languages to all countries.

HOME SERVICES
1st Prgr: W: 03.00–22.00 on 155/1315/1428kc, FM 70.4Mc; 03.00–06.30 on 1052/1457kc: 03.00–08.00 on 854kc; 03.00–04.00, 04.30–05.30, 05.35–13.00 on 755kc; 05.00–05.30, 05.45–06.30 on 908/1151/1484kc; 08.00–22.00 on 557kc. Sun: 04.00–22.00 on 155/557/1315/1428kc, FM 70.4Mc; 04.00–17.30 on 628kc.
N: W 03.00, 05.00, 08.00, 10.00, 12.00, 14.00, 16.00, 18.00, 20.00, 21.52. Sun 05.00, 09.00, 11.00, 18.00, 20.00, 21.52 – **Wrp:** W 03.00, 14.00, 20.00, Sun 20.00 –
2nd Prgr: 06.30–23.00 on 628/854kc; 14.00–14.30 on 755kc (Mon 15.00–15.30); 08.00–12.30, 17.30–23.00 on 908/1151/1484kc; 08.00–15.30, 17.30–23.00 on 1052/1457kc; 08.00–19.25, 21.00–23.00 on FM 72.74Mc (exc. Thurs, Fri 17.30–19.00). Close down on Sat is at 24.00. Sun: 05.00–23.00 on 854kc; 17.30–23.00 on 628kc; 06.00–06.30, 07.30–14.30, 15.15–17.00 on 755kc; 08.30–14.30, 15.15–23.00 on 908/1151/1484kc; 05.00–08.00, 08.30–23.00 on 1052/1457kc; 05.00–17.00, 21.00–23.00 on FM 72.74Mc.
N: W 07.00, 09.00, 11.00, 13.00, 15.00, 17.00, 19.00, 21.00, 22.52. Sun 05.50, 08.30, 12.00, 21.00, 22.52 – **Wrp:** 15.00, 21.00.
3rd Prgr: 17.00 (Sun 15.00)–19.30 on 72.74Mc –
ANN: Home Sce: 1st Prgr: Opening: "Aici Bucuresti, dragi ascultatori, buna dimineata. Transmitem Programul nostru pe statiile de radio cu lungimile de unda de...". 2nd Prgr: "Aici Bucuresti transmitem Programul II pe statiile de radio cu lungimile de unda de...". Close down: 1st, 2nd Prgr: "Aici Bucuresti, dam ora exacta. Emisiunea noastra s-a terminat. Ascultati-ne din nou miine dimineata la orele... pe lungimile de unda de... Dragi ascultatori, noape buna".
INT-SIG: Home Sce. 1st Prgr:



Home Sce. 2nd Prgr:



FOREIGN SERVICE
Stations: 100/130/150kW

kc	m	kc	m	kc	m	kc	m
155	19.35	6190	48.47	9570	31.55	11940	25.13
755	397.3	7195	41.70	9590	31.38	15250	19.67
5590	50.08	7225	41.52	11810	25.40	15380	19.5
6150	48.78	9510	31.55				

FOR EUROPE

English	kc
19.30–20.00	7195/7225/9510
21.00–21.30	5990/6190/7195
22.30–23.00	155
French	
11.30–12.00	11940
18.30–19.00	7195/7225/9510
20.30–21.00	5990/6190/7195
22.00–22.30	7225/1510
German	
19.00–19.30	5990/6190
21.00–22.00	755
22.00–32.30	5990/6190/7195/155
Greek	
17.00–17.30	5990/6190/7195 7225/9510
18.00–18.30	7225/9510/755
20.30–21.00	755
21.00–21.30	7225/9510
Italian	
17.30–18.00	7225/9510
18.30–19.00	5990/6190
19.30–20.30	755
22.00–22.30	755
Portuguese	
20.00–20.30	6190/7195/7225 9510/9570
Rumanian	
21.30–22.00	7225/9510
22.30–23.00	7225/9510/755
Serbian	
17.00–17.30	755
19.00–19.30	755
Spanish	
20.30–21.00	7225/9510
21.30–22.00	5990/6190/7195

FOR ASIA

English	kc
15.00–15.30	11940
Persian	
15.30–16.00	9570/7195/9510/7225
18.00–18.30	9570/7195/6190

FOR AFRICA

English	
15.00–15.30	11810/15250
French	
11.30–12.00	11810/15250
19.30–20.00	9570/6190

FOR NEAR-EAST

Arabic	kc
17.30–18.00	7195/6190
19.00–19.30	7195/7225/9510
Turkish	
16.30–17.00	5990/7195/6190 7225/9510
17.30–18.00	755

FOR U.S.A.

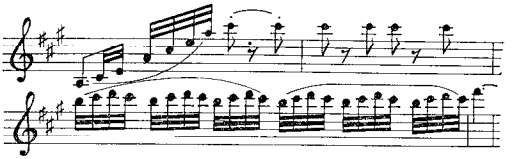
English	kc
01.30–02.30	6190/9590/9510/7225/6150/5990
03.00–03.30 / 04.30–05.00	9570/6190/9590/ 9510/7225/6150/5990
Rumanian	
23.15–24.00	6190/7225/9510
03.30–04.00	6190/725/9510/9570/5990/6150/9590
Yiddish	
02.30–03.00	6190/7225/9510 5990/6150/9590

FOR LATIN AMERICA

Portuguese	kc
00.00–00.30	6190/7225/9510 5990/6150/9590

Spanish	kc
00.30–01.30	6190/7225/9510 5990/6150/9590
04.00–04.30	6190/7225/9570/ 9510/5990/6150/ 9590

ANN: E: For No. Am: "This is Bucarest calling North America in the... meter bands, that is... kc, with today's first (second, third), broadcast in English". For Eu: "This is Bucarest calling, in the... meter bands, that is...kc, with today's first (second, third) broadcast in English". For N. East: "This is Bucarest calling the Near and Middle East in...meter bands, that is...kc". For Asia: "This is Bucarest calling Asia in the ...meter bands, that is...kc". For Af: "This is Bucarest calling Africa in the ...meter bands, that is...kc" – **F:** "Ici Bucarest. C'est Bucarest qui vous parle sur... Bonjour cheres auditrices, bonjour chers auditeurs! Veuillez écouter notre première émission en langue française de la journée (I-ère emission)". "Ici Bucarest. C'est Bucarest qui vous parle sur... Veuillez écouter cette émission en langue française, au cours de laquelle nous diffuserons...". "En espérant que cette émission vous est bien parvenue, nous vous disons: Au revoir chères auditrices, au revoir chers auditeurs. – I: "Parla Bucarest. E' Bucarest che vi parla nella sua prima (seconda, terza, quarta) trasmissione della giornata, su onde corte (medie) di metri... Amci escoltatori, buona sera". "Qui è radio Bucarest. La nostra prima (seconda, terza, quarta) trasmissione è terminata. A risentirci! Gentili signore e signori, buona notte" – Sp: "Habla Bucarest. Muy buenas noches, estimados oyentes. Comienza nuestra primera (tercera) emission en langua española por campos de onda de...metros" – G: "Hier ist der Rumänische Rund- und Fernsehfunk mit der Sendung in deutscher Sprache. Sie hören uns auf Kurzwelle...gleich...kHz... und auf Mittelwelle...". "Liebe Hörerinnen und Hörer, Radio Bucarest wünscht Ihnen Gute Nacht".
INT-SIG: Foreign Service: First Rhapsody by G. Enescu, played by orchestra.



V. by QSL-card or letter – **PUB:** "Programul de Radio si Televiziune" (weekly) free upon request.

AKG, Austria: delivered studio equip. (recorders, microphones). Telefunken AG, Germany: studio equip. (recorders). – Wilh. Franz KG, Germany: EMT studio equip.

SPAIN

L.T: GMT+1 h – **Pr.L:** Spanish.
RADIO NACIONAL DE ESPANA (Go.)
ADDR: General Yague 1, Madrid. **Te:** 2547000.
L.P: Dir. Gen: Broadc. TV: D.J. Aparicio Bernal. Vice Dir. Broadc. & Dir. R. Nacional: D.M. Aznar Acedo. Secr. Gen. Broadc. TV: D.M. Ledesma Adán. Dir. Tec. Broadc. TV: D.J. Sánchez Cordovés. Chief Economic Adm. Broadc. TV: D.A. Timermans Diaz. Chief of Constructions, Installations (Broadc): D.E. Fernández Marrero. Dir. Tec. Intern. Org. (Broadc.): D.J.M. Arto Madrazo. Chief low freq's: D. F. Mestre Carretero. Chief sw-tr's: D.C. González Madroño. Chief mw-tr's: D.A. Prieto Arozamena. Chief Adm: D.M. Martínez Pubul. Coordination: D.M. Estévez Alvarez. Tr's: D.M. Prats Cañete. Prgr's D.R. Ramos Losada. Inf's: D.J.L. Echarri Gamundi. Music: D.E. Franco Manera. Chief Foreign Sce: D.L. de Andrés Frutos. Chief Editor, N: D.F. Ruiz de Elvira, D. Clemente Pamplona Blasco. Chief of Public Rel: D. E. Pascual Souto.

HOME SERVICE

STATIONS	kc	m	kW	H of tr.
Madrid	584	513.7	200	08.00–24.00
Madrid (Arganda)	917	327	120	18.00–24.00
Madrid (Majadahonda)	584	513	200	07.00–24.00
Sevilla	683	439	250	07.00–24.00
La Coruña	728	412	100	07.00–24.00
Barcelona	935	321	20/5	06.55–05.00
Barcelona	737	407	250	04.55–02.00
Valencia	773	388	25	07.00–24.00
San Sebastian	638	470	20	06.00–24.00
Huelva	836	359	5	12.00–15.00, 17.00–23.00
Oviedo	566	530	5	10.15–23.00
Málaga	1007	298	6	12.00–24.00
Cuenca	1178	254	5	11.00–24.00
Tenerife	620	473.8	100	08.00–24.00

FM: Barcelona 93Mc: 12.00–24.00.
N (rel. by all st's): 13.30, 18.30, 21.00, 23.00.
ANN: "Transmite R. Nacional de España desde sus estudios en Madrid".

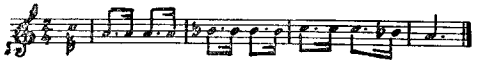
RED DE EMISORAS DEL MOVIMIENTO (R. E. M.)

The Red de Emisoras del Movimiento belongs to the National Delegation of Press and Radio.
FI.: by own resources. – AD.: 10 min. per h. – ADDR.: Generalísimo no. 142. Madrid – 16. Te.: 235.06.40. – LP.: Dir.: A. Arias. Adm.: M. Sagrera. Dir. Tec.: M. Vazquez. Pers.: J. Jiménez. Prgr.: J. León.

STATIONS CALL EFE.:	Kc./s	M.	Kw.	H. of tr.
1. La Voz de Valladolid	1.223	245'3	1	08.00—00.30
4. La Voz de Palencia	1.358	220'9	1	08.00—00.00
5. La Voz de León	1.223	245'3	1	08.00—00.00
6. La Voz de Extremadura	1.358	220'9	5	11.00—17.00 —20.30—23.30
8. La Voz de Alicante	1.358	220'9	2	08.00—00.30
9. La Voz del Panadés	1.358	220'9	1	13.00—15.00 —20.00—23.30
10. La Voz de Alava	1.223	245'3	1	08.00—16.30 —18.00—00.00
13. La Voz de Sagunto	1.223	245'3	1	10.00—16.30 —19.00—22.30
14. LA VOZ DE MADRID	1.079	278	20	08.00—03.00
15. La Voz del Ferrol	1.358	220'9	2	08.00—00.00
17. La Voz de Levante	1.079	278	5	08.00—00.30
18. La Voz de la Ribera Valenciana	1.223	245'3	1	08.00—00.00
19. La Voz de Castellón	1.358	220'9	1	08.00—23.30
22. La Voz del Principado de Asturias	1.223	245'3	5	08.00—02.00
23. La Voz de Guipuzcoa	1.223	245'3	5	08.00—00.30
24. La Voz de Orihuela	1.079	278	1	11.00—16.00 —18.00—00.00
25. La Voz de Cantabria	1.358	220'9	2	08.00—01.00
31. La Voz de Vigo	1.079	278	5	08.00—01.00
33. La Voz del Mediterraneo	1.570	191'1	5	08.00—00.30
40. La Voz de la Costa Brava	1.223	245'3	1	11.00—16.00 —20.00—00.00
43. La Voz de Requena	1.358	220'9	1	13.00—16.00 —20.00—00.00
50. La Voz de Cataluña	1.223	245'3	5	08.00—01.00
55. La Voz de Ausona	1.358	220'9	1	12.00—00.00
57. La Voz de Navarra	1.079	278	5	07.45—18.00 —19.30—23.00
58. La Voz de Andalucía	1.223	245'3	15	08.00—01.00

INT-SIG: Sintonia para Servicio:

Señal de pausa (trumpets):



FOREIGN SERVICE

Madrid-Arganda: 50/100kW

kc	m	kc	m	kc	m
6130	48.94	9360	32.05	9695	30.94
6140	48.86	9370	32.01	11715	25.61
7105	42.22	9615	31.20	11800	25.42
		9640	31.12	15420	19.45

EUROPEAN AND OVERSEAS SERVICE: see adv. page 129.
ANN: E: "This is the voice of Spain broadc. from the Spanish National Radio in Madrid" – **INT-SIG:** Gong and the following tune:

V. by QSL-card or letter – **PUB:** Teleradio (weekly).

Nippon Electric Co. Japan; delivered to Ministerio de Informacion y Turismo 200kW mw-tr, (parallel operation with two 100kW tr's). Brown Boveri, Switzerland: Mw-tr's: Sevilla 2×125kW, Barcelona 2×125kW, Madrid 1×20kW.
Telefunken AG, Germany: 100kW sw-tr (Barcelona) – 3×0.3kW FM-tr's. Wilh. Franz KG, Germany: EMT studio equip.

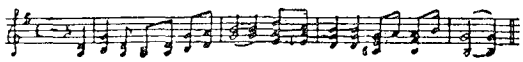
RED DE EMISORAS DEL MOVIMIENTO (R.E.M.)

(Broadcasting System of the Phalanx)
The Red de Emisoras del Movimiento belong to the National Delegation of Press and Radio.
FI: by own resources – **AD:** 10 min per h – **ADDR:** Generalísimo 142, Madrid 1, **Te:** 235.0640 – **L.P:** Dir: A. Arias. Adm: M. Sagrera. Dir. Tec: M. Vázquez. Personnel: J. Jiménez. Prgr: J. León.

STATIONS Call EFE:	kc	m	kW	H of tr.
1. La Voz de Valladolid	1385	217	1	07.00–23.30
2. Radio Teruel	1480	203	2	10.00–13.30, 18.00–22.00
4. La Voz de Palencia	1358	220.9	1	07.00–23.00
5. La Voz de León	1223	245.3	1	07.00–23.00
6. La Voz de Extremadura	1358	220.9	5	10.00–16.00, 19.30–22.30
7. Radio Denia	1403	213	0.7	11.30–15.00, 18.00–22.00
8. La Voz de Alicante	1358	220.9	2	07.00–23.30
9. La Voz del Panadés	1358	220.9	1	12.00–14.00, 19.00–22.30
10. La Voz de Alava	1223	245.3	1	07.00–15.30, 17.00–23.00
11. Radio Utiel	1358	220.9	0.09	11.30–15.00, 19.30–23.00
12. Radio Monóvar	1385	216.3	0.2	10.00–16.00, 18.00–23.00
13. La Voz de Sagunto	1223	245.3	1	09.00–15.30, 18.00–21.30
14. La Voz de Madrid	1079	278	20	07.00–02.00
15. La Voz del Ferrol	1358	220.9	2	07.00–23.00
17. La Voz de Levante	1079	278	5	07.00–23.30
18. La Voz de la Ribera Valenciana	1223	245.3	1	07.00–23.00
19. La Voz de Castellón	1358	220.9	1	07.00–22.30
20. Radio Ripoll	1480	202.7	0.07	12.00–14.00, 20.00–22.00
21. Radio Cazorla	1120	267	0.3	10.00–21.30
22. La Voz del Principado de Asturias	1223	245.3	5	07.00–01.00
23. La Voz de Guipúzcoa	1223	245.3	5	07.00 23.30
24. La Voz de Orihuela	1079	278	1	10.00–15.00, 17.00–23.00
25. La Voz de Cantabria	1358	220.9	2	07.00–24.00
26. Radio Luarca	1358	220.9	0.4	10.30–15.30, 18.30–21.15
27. Radio Maresma	1480	203	0.3	11.00–16.00, 18.00–22.30
28. Radio Tortosa	1607	187	0.9	08.30–22.30
29. Radio Tudela	1480	202.7	2	10.00–14.00, 18.00–23.00
31. La Voz de Vigo	1079	278	5	07.00–24.00
32. Radio Gredos	1480	202.7	20	07.00–24.00
33. La Voz del Mediterráneo	1570	191.1	5	07.00–23.30
34. Radio Atlántico	1480	203.4	2	07.00–23.00
35. La Voz de Urgel y Segarra	1480	203.4	0.37	10.00–22.30
38. Radio Badajoz	1390	215.8	5	07.00–10.30, 12.00–16.00 18.00–23.30
39. Radio Berga	1385	216.6	0.45	11.00–15.00, 18.00–22.00
40. La Voz de la Costa Brava	1223	245.3	1	10.00–15.00, 19.00–23.00

41. Radio Olot	1250	240	0.63	11.00–15.00, 18.00–22.00
42. Radio Sueca	1358	220.9	0.25	11.00–16.00, 18.30–23.00
43. La Voz de Requeña	1358	220.9	1	12.00–15.00, 19.00–23.00
44. Radio Picasent	1385	216.6	0.4	11.00–15.00, 17.00–23.00
45. La Voz de Granada	1250	240	2	07.00–00.30
47. Radio Cullera	1385	216.6	0.2	12.00–15.00, 19.00–23.00
49. Radio Chelva	1385	216.6	0.1	12.00–14.00, 20.00–22.00
50. La Voz de Cataluña	1223	245.3	5	07.00–24.00
51. Radio Mora de Ebro	1385	216.6	0.04	11.00–15.00, 19.00–23.00
52. Radio Vendrell	1385	216.6	0.06	11.30–14.30, 19.00–22.30
53. Radio Roda de Ter	1480	202.7	0.04	12.00–14.00, 19.00–21.00
54. Radio Cardona	1480	202.7	0.07	18.00–21.00
55. La Voz de Ausona	1358	220.9	1	11.00–23.00
56. Radio Blanes	1079	278	0.5	11.00–15.00, 19.00–22.00
57. La Voz de Navarra	1079	278	5	06.45–17.00, 18.30–22.00
58. La Voz de Andaluciá	1223	245.3	15	07.00–24.00
59. Radio Manises	1480	202.7	0.5	09.00–23.00
61. Radio Adra	1079	278	0.1	12.30–16.00, 19.00–22.00
62. La Voz de Burriana	1480	202.7	0.4	10.00–23.00

INT-SIG: Xylophone – **V.** by letter. Rp.



Locations indicated give a sufficient postal address: 6) Caceres – 9) Villafranca del Panadés – 17) Valencia – 18) Jativa – 22) Oviedo – 23) San Sebastian – 25) Santander – 33) Tarragona – 40) Palamos – 50) Barcelona – 55) Vich – 57) Pamplona – 58) Cordoba.

CADENA AZUL DE RADIODIFUSION

(Delegación Nacional de Juventudes)

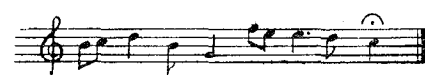
Organization: For the educational work of radio in Spain and for training of people engaged with radio.
ADDR: Reina 33, Madrid. **Cable:** Cadenazul. **Te:** 231-24-02.
L.P: Dir. Gen: R. Merino L. Dir. Tec: M. A. Martinez B.

STATIONS: Call: EFJ--. Name: R. Juventud de--.

Call Name	kc	m	kW	h of tr.
1. España	1106	271.2	15	06.00–24.00
2. Soria	1187	252.7	2	10.00–24.00
3. Martorell	1187	252.7	0.1	13.00–16.00, 20.00–23.00
4. Igualada	1187	252.7	0.1	13.00–16.00, 20.00–23.00
5. Cadiz	1187	252.7	2	10.00–24.00
6. Almansa	1187	252.7	0.1	13.00–16.00, 20.00–23.00
7. Plasencia	1187	252.7	0.8	13.00–16.00, 20.00–23.00
8. Ribadavia	1187	252.7	0.4	13.00–16.00, 20.00–23.00
9. Guadalajara	1250	240.0	0.8	13.00–16.00, 20.00–23.00
10. Algemesi	1106	271.2	0.8	13.00–16.00, 20.00–23.00
11. La Coruña	1106	271.2	2	08.00–01.00
12. Sabadell	1106	271.2	0.8	12.00–16.00, 19.00–24.00
13. Granollers	1187	252.7	0.28	12.00–16.00, 19.00–24.00
14. San Feliú	1187	252.7	1	10.00–24.00
15. Barcelona	1250	240.0	5	07.00–02.00
16. Mérida	1106	271.2	2	13.00–16.00, 20.00–23.00
17. Ayora	1250	240.0	0.08	13.00–16.00, 20.00–23.00
18. Villacarrillo	1187	252.7	0.8	12.00–16.00, 19.00–24.00
19. Murcia	1106	271.2	2	08.00–01.00
20. Villanueva	1106	271.2	0.04	13.00–16.00, 20.00–23.00
21. Barbastro	1187	252.7	0.8	12.00–16.00, 19.00–24.00
22. Menorca	1187	252.7	0.8	13.00–16.00, 20.00–23.00
23. Albacete	1187	252.7	2	10.00–24.00
24. Molins de Rey	1187	252.7	0.1	13.00–16.00, 20.00–23.00
25. Almeria	1187	252.7	2	10.00–24.00
26. Cartagena	1187	252.7	0.8	10.00–24.00
28. Baza	1250	240.0	0.8	13.00–16.00, 20.00–23.00
29. Ponferrada	1187	252.7	2	12.00–24.00
30. Laredo	1187	252.7	0.4	12.00–24.00
31. Balaguer	1250	240.0	2	12.00–16.00, 19.00–24.00
32. Motril	1187	252.7	0.08	12.00–16.00, 19.00–24.00
33. Villena	1250	240.0	0.4	13.00–16.00, 20.00–23.00
34. Osuna	1250	240.0	0.8	13.00–16.00, 20.00–23.00
35. Burjasot	1187	252.7	2	10.00–24.00
36. Alcañiz	1187	252.7	0.8	13.00–16.00, 20.00–23.00
37. Talavera	1250	240.0	0.4	12.00–16.00, 19.00–24.00
38. Bejar	1250	240.0	0.4	13.00–16.00, 19.00–23.00
39. Seo de Urgel	1187	252.7	0.25	13.00–16.00, 20.00–23.00
40. Aranjuez	1187	252.7	0.4	13.00–16.00, 20.00–23.00
41. Sama de Langreo	1106	271.2	2	10.00–24.00
42. Eibar	1106	271.2	0.4	12.00–16.00, 19.00–24.00
43. Vizcaya	1250	240.0	2	08.00–01.00
44. Torrelavega	1250	240.0	0.8	07.00–23.00
45. Balleraes, Inca	1106	271.2	2	10.00–24.00
46. Zaragoza	1106	271.2	5	08.00–01.00
47. Melilla	1250	240.0	0.4	13.00–16.00, 20.00–23.00
48. Monforte de Lemos	1250	240.0	0.4	13.00–16.00, 20.00–23.00
49. Villareal	1106	271.2	2	13.00–16.00, 20.00–23.00
50. Calahorra	1250	240.0	0.8	12.00–24.00
51. Ayamonte	1106	271.2	0.8	13.00–16.00, 20.00–23.00
52. Aranda de Dureo	1250	240.0	0.8	12.00–16.00, 19.00–24.00
53. Miranda de Ebro	1187	252.7	0.4	13.00–16.00, 20.00–23.00
54. San Clemente	1250	240.0	0.8	13.00–16.00, 20.00–23.00
55. Campo de Gibraltar	1250	240.0	2	08.00–23.00
56. Malaga	1106	271.2	5	07.00–02.00
57. Sta. Cruz de Tenerife (Canarias)	1106	271.2	5	10.00–24.00
58. Felanitx	1250	240.0	0.08	13.00–16.00, 20.00–23.00
59. Ciudad Rodrigo	1106	271.2	0.08	13.00–16.00, 20.00–23.00
60. Valdepeñas	1250	240.0	2	12.00–16.00, 19.00–24.00

FM: 1) 88.8Mc 0.5kW: 11.00–23.00 – 15) 89.7Mc 0.25 kW – 46) 94.0 Mc 0.3kW – 57) 95.0Mc 0.25kW.

D.PRGR: Consist of cultural and educational prgr's, information service about the youth-work, actualities and entertainment.
ANN: "Habla Radío Juventud de... Estacion num... de la Cadena Azul de Radiodifusión" – **INT-SIG:** Vibrafon.



V. by QSL-card. Records accepted – **F.PL:** Increase power of several mw's.

SOCIEDAD ESPAÑOLA DE RADIODIFUSION (Comm.)

FI: By adv – **ADDR:** Av. de José Antonio 32, Apt. 745, Madrid. **Cable:** SER. **Te:** 2-22-11-81 – **L.P:** Pres: A. G. Diaz-Cañabate. Dir. Gen: E. Fontán Pérez. Subdir. Gen, Sec. Gen: R. Varela. Pol. Dir. Tec: J. Galindo Crespo.

STATIONS (Main st's):

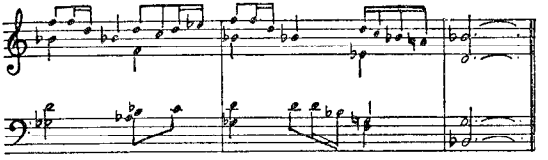
	Call	kc	m	kW	h of tr.
R. Barcelona	EAJ-1	827	362.7	5	04.00–03.30
R. Valencia	EAJ-3	1259	238.3	5	06.00–01.00
R. Galicia	EAJ-4	1448	207.1	0.9	07.00–01.00
R. Sevilla	EAJ-5	800	375	5	07.30–01.00
R. Madrid	EAJ-7	809	370.8	20	07.00–03.30
R. San Sebastian	EAJ-8	1025	292.7	5	07.00–01.00
R. Reus	EAJ-11	1430	209.8	2	08.00–01.00
R. Bilbao	EAJ-28	1133	264.8	5	07.00–01.00
R. Alicante	EAJ-31	1448	207.1	2	08.00–01.00
R. Alcira	EAJ-54	1500	200	0.7	08.00–01.00
R. Mediterraneo Valencia FM		97Mc		5	08.00–01.00

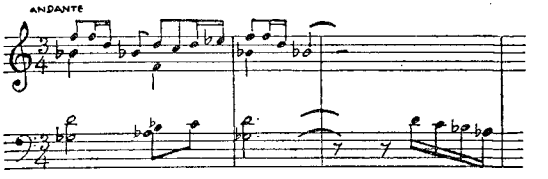
ASSOCIATED STATIONS:

	Call	kc	m	kW	h of tr.
R. Requeté de Navarra (Pamploma)	EAJ-6	1394	215.2	2	08.00–24.00
R. Alcoy	EAJ-12	1250	240	1.3	08.00–01.00
R. Mallorca	EAJ-13	1439	208.2	5	08.00–24.00
R. Castellón	EAJ-14	1403	213.8	1.2	08.00–24.00
R. Granada	EAJ-16	1448	207.1	5	08.00–02.00
R. Murcia	EAJ-17	1511	198.4	2	08.00–01.00
R. Rioja (Logroño)	EAJ-18	1484	202.2	2	08.00–24.00
R. Asturias (Oviedo)	EAJ-19	1268	236.6	2	08.00–24.00
R. Huesca	EAJ-22	1475	203.4	2	08.00–24.00
R. Gandía	EAJ-23	1412	212.4	2	08.00–24.00
R. Castilla (Burgos)	EAJ-27	1448	207.2	9	08.00–24.00
R. Santander	EAJ-32	1484	202.2	1	08.00–01.00
R. Gijón	EAJ-34	1492	201.1	2	08.00–24.00
R. Gerona	EAJ-38	1448	207.2	2	08.00–24.00
R. Pontevedra	EAJ-40	1439	208	2	08.00–24.00
R. Coruña	EAJ-41	1295	231.7	0.5	08.00–01.00
R. Albacete	EAJ-44	1493	201.1	1	08.00–24.00
R. Valladolid	EAJ-47	1475	203.4	2	08.00–24.00
R. Vigo	EAJ-48	1403	213.8	5	08.00–01.00
R. Las Palmas	EAJ-50	1313	228.5	0.5	08.00–01.00
R. Manresa	EAJ-51	1492	201.1	3	08.00–24.00
R. Extremadura (Badajoz)	EAJ-52	1484	202.2	2.5	08.00–24.00
R. Salamanca	EAJ-56	1313	228.5	2	08.00–24.00
R. Jerez	EAJ-58	1493	201.1	1	08.00–24.00
R. Almeria	EAJ-60	1394	215.2	2	08.00–01.00
R. Jaen	EAJ-61	1412	212.5	2	08.00–24.00
R. Vitoria	EAJ-62	1457	205.9	2.5	08.00–24.00
R. Leon	EAJ-63	1502	199.7	2	08.00–24.00
R. Segovia	EAJ-64	1502	199.7	1	08.00–24.00
R. Ciudad Real	EAJ-65	1448	207.1	0.3	08.00–24.00
R. Lugo	EAJ-68	1487	202.1	1	08.00–24.00
R. Zamora	EAJ-72	1392	215.4	1	08.00–24.00
R. Zaragoza	EAJ-101	872	344	20	08.00–05.00

The above times are local times. Please deduct 1h for GMT.

NATIONAL SERVICE:
The prgr's of Sociedad Espanola are rel. simultaneously by all st's at the following hours: Mon: 20.00–20.45, 21.30–22.00; Tues, Fri: 19.30–20.45, 21.30–22.30; Sat: 19.30–20.45, 21.30–24.00; Sun: 16.00–19.00.
ANN: Nat. Sce: "Transmite la Sociedad Espanola de Radiodifusion". Local Service: "Transmite R.., de la Sociedad Espanola de Radiodifusion; – INT-SIG: Harp, piano:

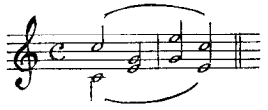




V. by letter. Records accepted. PUB: "ONDAS" fortnightly.

COMPAÑIA DE RADIODIFUSION INTERCONTINENTAL (Comm.)

ADDR: Diego de León 50, Madrid. Cable: Ondatlantic – L.P: Dir. Gen: F. Serrano-Suner Polo.
STATION: EAJ29 953kc 314.8m 20kW.
HOME SCE: 07.45–02.00.
ANN: "Aqui R. Intercontinental, Madrid" – INT-SIG: Xylophone.



V. by QSL-card or by letter
Records accepted.

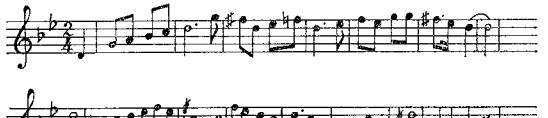
AKG, Austria: Studio equip (recorders, microphones).

R. ESPAÑA

AD: Allowed all day – ADDR: Manuel Silvela, 9, Madrid 10. Te: 2-23-29-40. Cable: Radiospana.
HOME SCE: Madrid EAJ2 854kc 351.2m 12kW: 07.00–01.00. N: 19.30–20.10 – ANN: "EAJ2 R. España, Madrid".

R. ESPAÑA DE BARCELONA

ADDR: Ramblas 126, Barcelona 2. Te: 2-22-0751 – L.P: Dir. Gen: G. Serraclara de la Pompa. St. Mgr: A. Banda Moras.
HOME SCE. (System: Collins): EAJ15 1124kc 266.9m 10kW: 06.00–02.00 – V. by letter. Records accepted.
INT-SIG:



Affiliated st's: EAJ38 R. Gerona 1447kc – EAJ 42 R. Lérida 1511kc 2kW: 07.00–23.00 – EAJ51 R. Manresa 1492kc 2.5kW.

RUEDA DE EMISORAS RATO

ADDR: Jorge Juan, 27 Madrid. Te: 2760407.
L.P: Dir. Gen: R. Rato. Dir. Publicity: A. Ceballos.
MAIN STATION: EAJ49 R. Toledo 1142kc 262.7m 8kW.
HOME SCE: 09.00–16.00, 18.00–23.00.

Branch Stations:	kc	kW	h of tr.
EAJ26 R. Antequera	1367	2.5	10.00–15.00, 17.00–23.30
EAJ35 R. Panadés	1094	2	07.00–15.00, 17.00–24.00
EAJ59 R. Cadiz	1322	2	07.00–23.00

INT-SIG Electric gong (two tones) – V. by letter. Records accepted.

CADENA DE ONDAS POPULARES ESPAÑOLA

ADDR: Avda. José Antonio, 55(Los Sótanos-25), Madrid 13.
L.P: Dir. Gen: R. Francisco-Javier S.O.P. Dir. of Prgr's (Central Sce): P. Gonzales C.

STATIONS: Call: EAK (R. Popular de):

Name	No	kc	kW	Name	No	kc	kW
Albacete	46	1097	2	Montilla (Cordoba)	90	1340	2
Alicante	31	1277	2	Murica	12	1304	2
Alcira (Valencia)	56	1151	2	Norena (Oviedo)	10	1304	0.5
Astorga (Leon)	48	1097	2	Pamplona	4	1322	2
Asturias (Aviles)	91	1322	2.4	Pozablanco (Cordoba)	81	1358	1
Badajoz	21	1304	2	Puente Genil (Cordoba)	88	1142	1
Benavente (Zamora)	37	1304	2	Puertollano (Ci Real)	23	1322	1
Bilbao	13	1304	1	Reus (Tarragona)	53	1340	2
Burgos	3	1097	2	Salamanca	19	1142	2
Cieza (Murcia)	28	1200	2	S. Javier (Murcia)	30	1250	0.5
Ciudad Real	22	1277	2	San Sebastian	44	1277	2
Elda (Alicante)	32	1340	0.5	R. Vida (Sevilla)	2	1097	2
Figueras (Gerona)	82	1142	2	Tarazona (Zaragoza)	73	1304	2
Guimar (Tenerife)	83	1304	2	Torrente	16	1052	0.25
Huelva	14	1538	2	Velez-Malaga (Malaga)	42	1538	2
Ibiza (Baleares)	24	1358	1.5	Villacanas (Toledo)	36	1097	0.5
Jaca (Huesca)	76	1358	1	Zaragoza	6	1322	2
Leon	25	1052	2				
Lerida	15	1097	2				
Lorca (Murcia)	29	1052	1.5				
Loyola (Guipuzcoa)	66	1097	2				
Mallorca	18	1340	2				
Menorca	67	1358	0.4				

SYNDICAL ORGANISATION STATIONS (belonging to Organizacion Nacional de Sindicatos).

ADDR: Cadena de Emisoras Sindicales, Delegacion Nacional de Sindicatos, 2a Planta, Paseo del Prado 18 y 20, Madrid. Call=ECS No.... V.=La Voz...

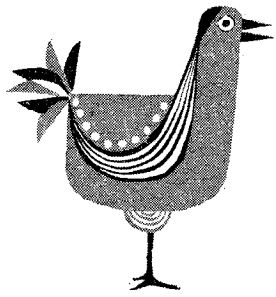
Call	Name	kc	kW	h. of tr.
1.	R. Teruel	1484	3	10.00–15.00, 18.00–23.00
2.	R. Badajoz	1385	5	07.30–10.30, 12.00–23.00
3.	R. Gredos	890	15	
4.	R. Atlantico	1480	2	06.00–23.15
5.	V. de Granada	1385	5	
6.	R. Tortosa	1250	2	
7.	R. Tarrega	1385	2	08.00–23.00
8.	R. Tudela	1484	2.5	09.00–17.00, 18.00–23.00
9.	V. del Noreste	1385	5	
10.	R. Socuéllamos	890	3	08.00–23.00
11.	R. Ronda	1480	2.5	09.00–15.00, 17.00–23.00
12.	R. Atlalaya	1520	2	06.00–23.00
13.	R. Coral	1250	2	
14.	V. de Gerona	1106	2	07.00–24.00
15.	R. Marbella	1385	3	08.00–23.00
16.	V. de Guadix	1484	1	09.00–15.00, 18.00–23.00
17.	V. de Martos	1448	2	09.00–22.00
18.	R. Carzola	1126	1	10.00–23.00
19.	V. del Cinca	1484	2	11.00–23.00
20.	V. de Ubeda	1483	3	07.00–23.00
21.	V. de Baeza	1484	2	
22.	R. Huéscar	1487	0.8	11.00–16.00, 18.00–22.00
23.	V. del Guadalquirvir	1484	0.5	
24.	V. Isla de la Palma	7345	0.5	08.00–15.00, 17.00–22.00
25.	V. del Valle	1450	1	08.00–22.00
26.	Ondas del Sil	1116	1.5	11.00–15.00, 19.00–23.00
28.	V. del Estrecho	1484	1	10.00–17.00, 19.00–23.00
29.	V. de Orgiva	1400	0.1	10.00–14.00, 19.00–22.00
30.	R. Penarroya	1450	2	11.00–23.00
31.	R. Jumilla	1480	1	10.00–16.00, 18.00–23.00
32.	R. Moron	1225	3	06.00–23.00
33.	R. Marchena	1285	1	10.00–22.00
34.	V. de la Sierra	1385	0.25	
35.	V. del Pirineo	1484	1	11.00–15.00, 17.00–22.00
36.	R. Costa Dprada	1250	3.5	08.00–22.00
37.	V. de Limia	1187	0.5	11.00–15.00, 18.00–23.00
38.	R. Torrox	1187	1	10.00–16.00, 19.00–23.00
39.	R. Moncayo	1480	1	11.00–15.00, 18.00–23.00
40.	V. del Bajo Aragon	1484	1	11.00–15.00, 18.00–21.00
41.	V. del Mar	1484	2	11.00–15.00, 18.00–23.00
42.	V. de Almeria	1250	0.5	
43.	V. de Loja	1250	0.5	12.00–16.00, 19.00–23.00
44.	V. de Ciudad Real	1340	3.2	08.00–23.00
46.	V. de los Campos de Utiel	1520	1	10.00–15.00, 19.00–23.00
47.	R. Riudoms	1520	0.5	12.00–16.00, 19.00–23.00
48.	V. de Andujar	1520	1	

49. V. del Maestrazgo	1520	0.5	10.00–16.00, 18.00–21.00
50. R. Montblanch	1520	1	
51. V. del Tiétar	1520	0.5	17.00–23.00
52. R. Onda	1385	0.5	
53. R. Sur	1250	2	08.00–23.00
54. R. Alcala la Real	1484	0.5	
55. R. Costa de Azahar	1484	0.5	
56. V. del Bajo Ebro	1484	1	07.00–22.00
57. V. de la Huerta	1200	2	07.00–23.00
58. R. Tamarite	1484	0.5	
60. V. de Valencia			
61. V. de la Plana			
62. V. de los Llanos	1385	1	09.00–22.00
64. V. de Hellin	1520	1	07.00–16.00, 18.00–22.00
65. V. de Villarrobledo	1358	0.5	10.00–15.30, 18.00–23.00
68. V. del Sudeste			
69. V. de Jaen	1106	5	07.00–23.00
70. V. del Condado	1520	0.5	12.00–14.30, 17.00–23.00
71. V. de la Cerdana			
72. V. de Tafalla	1500	0.5	12.00–15.00, 19.00–22.00

FM-Stations: ECS-2M R. Atlantico (Las Palmas); ECS-3M V. de Jaén 93.6Mc 0.5kW: 11.00–14.00, 19.00–23.00; ECS-4M V. de Canarias (Tenerife).

Locations: 3) Avila, 4) Las Palmas, 6) Tarragona, 7) Lérida, 8) Navarra, 9) Mataro, 10) C. Real, 11) Malaga, 12) Cabra Cordoba, 13) Crevillente-Alicante, 15) Malaga, 16) Granada, 17) Jaen, 18) Jaen, 19) Fraga-Huesca, 20) Jaen, 21) Jaen, 22) Granada, 23) Sevilla, 25) La Orotava-Tenerife, 26) Barco de Valdeoras – Orense, 28) Estepona-Malaga, 29) Granada, 30) Cordoba, 31) Murcia, 32) Sevilla, 33) Sevilla, 34) Cazalla-Scvilla, 35) Ripoli-Gerona, 36) Ulldecona-Tarragona, 37) Ginza de Limia-Orense, 38) Malaga, 39) Borja-Zaragoza, 40) Caspe-Zaragoza, 41) Almunécar-Granada, 42) Berja, 43) Granada, 46) Valencia, 47) Tarragona, 48) Jaen, 49) Morella-Castellon, 50) Tarragona, 51) Piedralaves-Avila, 52) Castellon, 53) Coin – Malaga, 54) Jaen, 55) Benicarlo Castellon, 56) Alcanar-Tarragona, 57) Alcantarilla Murcia, 58) Huesca, 60) Manises, 61) Burriana-Castellon, 62) La Roda Albacete, 64) Albacete, 65) Albacete, 68) Cartagena, 70) La Palma del Condado-Huelva, 71) Puigcerda-Gerona, 72) Navarra.

Advertisement



The Swedish interval-signal is taken from Swedish Broadcasting Corporation bird recordings which are available on discs.

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Arthur A. Allen, Cornell University.

. . . Radio Sweden have issued the most comprehensive collection of European bird voices . . . and about two minutes of each species . . .

James Fisher in a transmission of the BBC, January 1963.

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Sveriges Radio

INDEPENDENT STATIONS

Call	Name	kc	kW	h. of tr.
EAJ20	R. Sabadell	1430	3	07.00–15.00, 17.00–23.00
EAJ21	R. Melilla	1150	1	06.00–15.30, 19.00–23.00
EAJ24	R. Cordoba	1449	0.2	
EAJ25	R. Tarrasa	1502	0.2	08.00–22.30
EAJ30	R. Onteniente	1457	1	09.00–16.00, 19.00–23.00
EAJ39	R. Miramar de Badalona	1313	5	07.00–24.00
EAJ43	R. Clube Tenerife	1412	0.5	08.00–23.00
EAJ53	R. Elche	1538	5	07.00–23.30
EAJ55	R. Algeciras	1511	0.5	11.00–15.00, 19.00–23.00
EAJ57	R. Orense	1457	3.8	10.00–23.00
	R. Rojales	1520	0.5	09.00–15.00, 18.00–23.00
	R. Callosa de Segura	1575	0.2	09.00–15.00, 18.00–23.00

FM: EAJ21 R. Melilla 94.8Mc: 15.30–19.00 – EAJ39 R. Miramar de Badalona 94.8Mc 1kW: 07.00–24.00 – EAJ53 R. Elche 94.8Mc 0.5kW 07.00–23.30.

SWEDEN

L.T: GMT+1 h – **Pr.L:** Swedish.

SVERIGES RADIO (Swedish Broadcasting Corporation)
(Non comm, semigov. broadc. corpo.)
FI: By license payments – **ADDR:** Radiohuset, Oxenstiernsgatan 2, Stockholm, Postal Addr: Box 955, Stockholm 1. **Cable:** Broadcast. **Te:** 670865 (local 631000).
L.P: Chmn. Board of Govenors: P. Eckerberg. Dir. Gen: O. Rydbeck. Dep. Dir: J. von Utfall. Dir. Finance Dept: L. Öhrström. Dir. Tec: J. von Utfall. Dir. Prgr. Sound: N. O. Franzén. Dir. Prgr. TV: N. E. Baehrendtz. Dir. Staff: N. Ragnå. Dir. Pub. Dept: M. Ginsburg. Dep. Dir. Tec: C. Wachtmeister. Dep. Dir. Prgr. TV: K. E. Lundewall. School Broadc: Head: R. Lundgren. Asst. Head: S. S. Allebeck. International Dept. and External Relations: Head: Mrs. B. Svinhufvud. Secr. Internat. Dept: G. Dahlin. Eurovision Office: Mrs. M. Lamby. Head Press and Inf: Ph. von Krusenstierna.

KUNGL. TELESTYRELSEN (The Telecommunications Administration) has the responsibility for the distribution of the prgr's production by Sveriges Radio and has also charge of the collection of license fees. **ADDR:** Box 16065, Stockholm 16. **Cable:** Radiobyrån. **Te:** Trunk calls 236060, local calls: 236040 – **L.P:** Dir. Gen: H. Sterky. Chief of R. Dept: E. Esping. Chief of Broadc. Sce: K. Ekström.
STATIONS: Medium Waves: *=st's carrying night prgr.

Station	Prgr.	kc	kW	Station	Prgr.	kc	kW
Boden	2	1594	0.15	Mariestad	2	1394	0.15
Borås	1	1562	2	Motala	1	*191	600
	2	1394	0.15	Norrköping	1	1562	1.5
Eskilstuna	1	1562	0.5	Piteå	2	1394	0.15
Falkenberg	1	1448	0.15	Porjus	1	1529	0.075
Falun	1	*1223	100		2	1594	0.075
Gävle	1	1448	0.5	Stockholm	1	*773	150
Göteborg	1	*980	150		2	1394	0.25
	2	1394	0.25	Sundsvall	1	*593	150
Halmstad	1	1562	2		2	1394	0.15
	2	1394	0.15	Säffle	1	1448	0.15
Hudiksvall	1	1448	1.5		2	1594	0.15
	2	1394	0.15	Söderhamn	1	1562	0.06
Hälsingborg	1	1448	1.5		2	1394	0.15
Hörby	1	*1178	100	Trollhättan	1	1448	2
Jönköping	1	1448	2		2	1594	0.15
	2	1594	0.2	Uddevalla	1	1562	0.5
Kalmar	1	1562	2		2	1394	0.15
Karlskrona	1	1448	1.5	Umeå	1	1448	2
Karlstad	1	1562	1.5		2	1594	0.15
	2	1394	0.15	Uppsala	1	1562	2
Kiruna	1	1562	0.5	Varberg	1	1562	2
	2	1394	0.15		2	1394	0.15
Kristinehamn	1	1448	0.15	Visby	1	1448	0.5
	2	1594	0.15	Vänersborg	2	1394	0.15
Ludvika	2	1394	0.15	Västervik	2	1394	0.15
Luleå	1	*182	10	Västerås	1	1448	2
	2	1394	0.15	Örebro	1	1562	0.5
Malmberget	1	773	2	Örnsköldsvik	1	1562	1.5
	2	1394	0.15		2	1394	0.15
Malmö	1	1562	2	Östersund	1	*719	150

Wired Broadc: Prgr. 1: 164kc 1829m – Prgr. 2: 209kc 1435m.
Short Waves: Hörby I, II 100kW.
6065kc 49.46m – 9620kc 31.19m.

FM:	Prgr.	Mc	kW		Prgr.	Mc	kW
				Bollnäs	1	91.8	15
Arvidsjaur	1	89.4	60		2	96.0	15
	2	94.2	60	Borlänge	1	89.4	60
Boden	1	94.5	60		2	93.0	60
	2	99.4	60	Borås	1	88.5	10
	3	90.6	15		2	94.6	10

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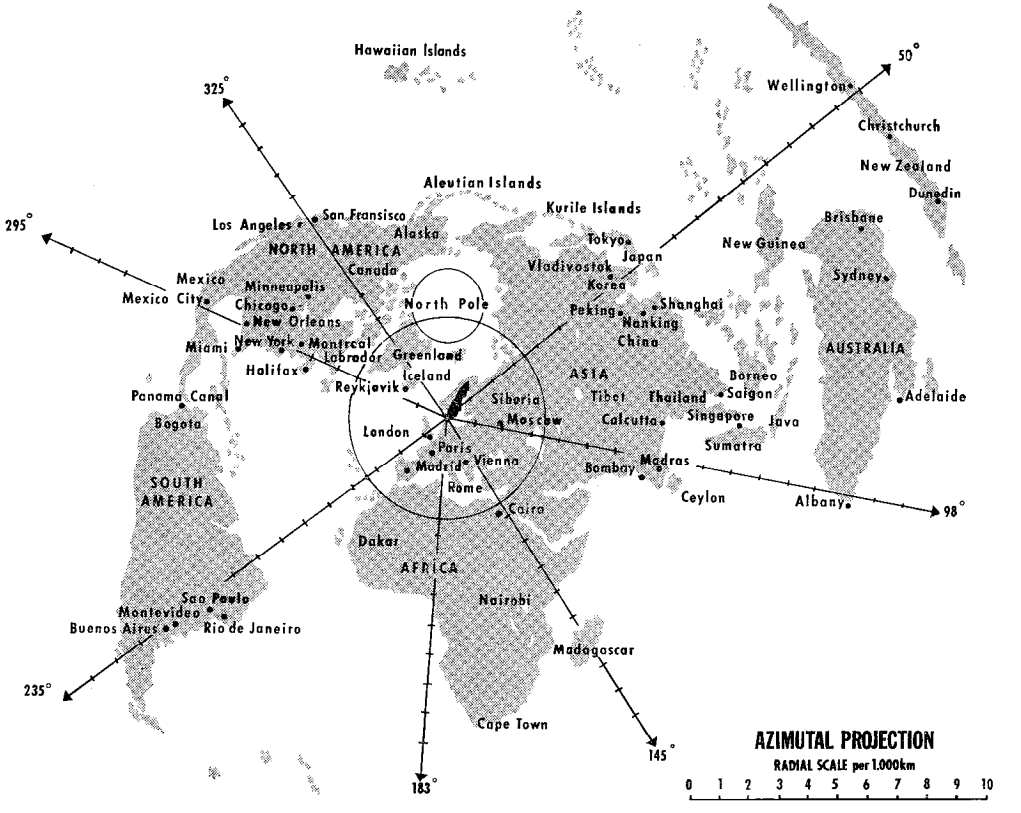
The transcription service

offers a wide range of recorded programmes about Sweden.

The television service offers films about Sweden in different languages or with an international soundtrack.



Sweden

FM:	Prgr.	Mc	kW
Bäckefors	1	92.7	60
	2	96.8	60
Emmaboda	1	93.0	60
	2	96.7	60
	3	99.8	60
Gäddede (s)	1	88.9	0.03
	2	96.2	0.03
Gällivare	1	90.0	60
	2	94.9	60
Gävle	1	88.1	60
	2	97.4	60
	3	99.8	60
Göteborg	1	99.4	60
	2	90.3	60
	3	99.4	60
Halmstad	1	87.9	60
	2	91.2	60
Haparanda	1	91.3	60
	2	93.6	60
Hälsingborg	1	89.5	3
	2	95.7	3
Hörby	1	88.8	60
	2	92.4	60
	3	97.0	60
Karlskrona	1	89.1	10
	2	95.0	10
Kiruna	1	89.1	60
	2	92.7	60
Laisvall (s)	1	90.8	0.03
	2	95.1	0.03
Lycksele	1	92.9	60
	2	95.4	60
Malmö	1	93.3	3
	2	98.7	3
Mora	1	92.2	10
	2	96.7	10
Motala	1	91.1	3
	2	93.8	3
Norrköping	1	90.0	60
	2	93.5	60
	3	98.7	60
Nässjö	1	89.6	60
	2	92.1	60
	3	99.0	60
Pajala	1	87.9	60
	2	93.0	60
Seitevare (s)	1	90.9	0.03
	2	93.7	0.03
Skellefteå	1	93.8	10
	2	96.3	10
Skövde	1	88.9	60
	2	95.1	60
Sollefteå	1	93.5	60
	2	98.1	60
Stockholm	1	92.4	60
	2	96.6	60
	3	99.3	60
Storuman	1	87.6	60
	2	91.2	60
Strömstad (s)	1	91.6	0.03
	2	94.3	0.03
Sundsvall	1	92.7	60
	2	96.9	60
	3	99.2	60
Sunne	1	90.9	60
	2	94.5	60
Sveg	1	90.6	60
	2	94.9	60
Täsjö	1	89.8	60
	2	94.7	60
Tärnaby (s)	1	88.9	0.03
	2	95.7	0.03
Uddevalla	1	89.9	60
	2	93.1	60
Uppsala	1	90.3	3
	2	93.3	3
Varberg	1	90.4	3
	2	93.6	3
Visby	1	97.2	15
	2	99.5	15
Vislanda	1	88.0	10
	2	90.6	10
Vännäs	1	88.5	60
	2	92.1	60
	3	95.8	60
Västervik	1	91.8	25
	2	96.0	25
Västerås	1	95.7	15
	2	98.0	15
Örebro	1	87.9	60
	2	91.5	60
Örnsköldvik	1	90.8	3
	2	94.4	3
Östersund	1	97.9	60
	2	91.5	60

FM St's under construction 1) before Jan 1st 1965, 2) before July 1st 1965. s=satellite. *=increase power.

	Prgr.I Mc	Prgr.II Mc	kW
1) Björkliden (s)	88.0	93.9	0.03
1) Enafors (s)	88.9	92.8	0.03
1) Funäsdalen (s)	89.6	96.3	0.03
1) Idre (s)	88.0	89.9	0.03
1) Stordalen (s)	89.6	92.3	0.03
1) Sysslebäck (s)	88.8	92.5	0.3

	Prgr.I Mc	Prgr.II Mc	kW
1) Torneträsk (s)	87.6	91.3	0.03
1) Vassijaure (s)	90.7	95.1	0.03
2) Bollnäs*	88.4	91.8	60
2) Karesuando (s)	88.4	91.5	0.3
2) Ånge*	93.2	95.6	10

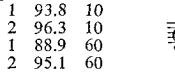
Projected st's for prgr. III before July 1st 1965:
Kiruna 99.6Mc 60kW – Malmö 98.7Mc 3kW – Skövde 97.5Mc 60kW – Sunne 98.5Mc 60kW – Örebro 99.6Mc 60kW.

HOME SERVICE

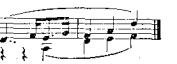
FIRST PRGR. (light talk and music): Mon, Tues, Thurs 04.55–23.00. Wed, Fri, Sat 04.55–24.00. Sun 06.00–23.00 – **Night Prgr.** on 182/191/593/719/773/980/1178 (exc. 23.00–24.00 European Sce.)/1223kc: Sun, Mon, Tues, Thurs 23.00–04.40, Wed, Fri 00.00–04.40. Sat 00.00–05.45.
Short Waves: 05.00–09.00 6065kc, 09.00–12.00 9620kc, 17.15–21.30 on 6065kc.
N: 07.00, 11.30, 14.00, 16.00, 17.30, 18.00, 21.00, 22.00. Mon–Fri: 05.00, 05.30 06.00, 06.30, 10.00, 20.00. Sat: 05.00, 05.30, 05.58, 10.00 – **Wrp:** (incl. Forecast for Swedish Waters) D: 05.30, 07.00, 11.30, 18.00, 20.50. Forecast for Swedish Waters only: D 16.00 – **Rlg. Prgr's:** Morning Sce's: W: 05.20, 06.40. Sun. Divine Sce: 10.00, 16.10.

SECOND PRGR. (Light music to approx. 17.15, serious talk and music after 17.00): W 04.40–22.30 (approx), Sun 05.45–22.30 (approx). **Rlg. Prgr's:** Evening Sce's: W 21.05, Sun 21.10.
THIRD PRGR. Light music: W 17.15(Sat 16.15)–21.00, Sun 17.15–21.10.
ANN: (Nat. Prgr): "Sveriges Radio..." and the name of the transmitting st, for instance: "Sveriges Radio, Stockholm" – **INT-SIG:** Home Service 1st Prgr: The opening notes from Carl Michael Bellman's "Storm och böljor tystna re'n" and 2nd Prgr: from Bellman's "Fredmans Epistel No 64": "Fäll dina ögon och skäms nu din tåssa".

Home Service 1st Prgr:



Home Service 2nd Prgr:



FOREIGN SERVICE

Stations: Hörby 100kW.

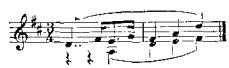
kc	m	kc	m	kc	m	kc	m
1178	254.7	9620	31.19	11705	25.63	15240	19.69
5990	50.08	9705	30.91	11805	25.41	15445	19.43
6065	49.46	9765	30.72	11810	25.41	17845	16.81
7210	41.61						

EUROPEAN SERVICE: English: 22.00–22.30 6065kc, 23.30–24.00 1178kc – **French:** 20.30–21.00 5990kc, 21.45–22.15 5990kc – **German:** 21.30–22.00 6065kc, 23.00–23.30 1178kc – **Portuguese:** 22.15–22.45 5990kc – **Spanish:** 21.15–21.45 5990kc.
OVERSEAS SERVICE: I=Far East; II=Ea. No. Am; III=So. Asia; IV=M. East; V=Africa; VI=So. Am; VII=We. No. Am; VIII=Mexico, C. Am; a=English, b=Swedish, c=German, d=Spanish, e=Portuguese, f=French. A: 1/11 64–6/3 65; B: 7/3 65–7/11 65.

Times	Areas	L.	A	B
12.30–13.00	I	a	7210	9620
13.00–13.45	I	b	11810	17845
14.00–14.30	II	a	15240	15240
14.45–15.15	III	a	9765	9765
15.15–16.00	III	b	15445	15445
16.15–16.45	IV	a	6065	11705
			11705	15240
16.45–17.30	IV	b	11705	11705
17.45–18.15	V	f	11705	11705
18.15–19.00	V	b		
19.15–19.45	V	c	11705	11705
19.45–20.15	V	a		

Times	Areas	L.	A	B
23.00–23.30	VI	e	11705	11705
23.30–00.30	VI	d	9620	9620
01.00–01.45	II	b	9705	11805
01.45–02.15	II	a		
01.00–01.45	VI	b	11705	11705
01.45–02.15	VI	e		
02.15–02.45	VI	c		
02.45–03.15	VI	d		
02.30–03.15	VII	b	9705	11805
03.15–03.45	VII	a		
04.00–04.30	VIII	d	9705	11805

Radio Sweden reserves the right to alter the schedule if necessary.
DX-PRGR: "Sweden calling DX'ers": English: Every Tues/Wed as last part of the English half hour at 12.30, 14.00, 14.45, 16.15 19.45, 22.00, 23.30, 01.45, 03.15 – **German:** Wed 19.15, 21.30, 23.00 – **French:** Sat 17.45, 20.30, 21.45.
ANN: E: "This is R. Sweden" – G: "Hier ist der Schwedische Rundfunk, Stockholm" – Fr: "Ici Radio Suède" – Sp: "Habla Estocolmo" – P: "R. Suécia apresenta" – Sw: "Sveriges Radio, Utlandsprogrammet".
INT-SIG: Foreign Sce: The opening notes from Carl Michael Bellman's "Storm och böljor tystna re'n".



V. by QSL-card, folder and/or letter. R. Sweden will appreciate all letters and reports on reception of the transmissions. Prgr.schedules by writing to Radio Sweden, Box 955, Stockholm 1.
PUB: Monthly: "Radio Sweden" in six languages: English, German, French, Spanish, Portuguese, Swedish. Weekly: "Röster i Radio-TV".
Tr's: Long & Medium Waves: Prgr 1: Marconi: Hälsingborg, Jönköping, Karlskrona, Karlstad, Norrköping, Trollhättan, Umeå, Uppsala, Västerås, Örnsköldsvik, Östersund – Standard: Borås, Falkenberg, Göteborg, Halmstad, Hudiksvall, Hörby, Kalmar, Kristinehamn, Malmberget, Malmö, Porjus, Stockholm, Sundsvall, Säffle, Söderhamn, Varberg – Telefunken: Eskilstuna, Falun, Gävle, Kiruna, Luleå, Uddevalla, Visby, Örebro – Thomson-Houston: Motala – **Prgr 2:** Standard: Boden, Borås. Halmstad, Hudiksvall, Karlstad, Kiruna, Kristinehamn, Ludvika, Luleå, Malmberget, Mariestad, Piteå, Porjus, Sundsvall, Säffle, Söderhamn, Trollhättan, Uddevalla, Umeå, Varberg, Vänersborg, Västervik, Örnsköldsvik – Telefunken: Jönköping – Western-Electric: Göteborg, Stockholm – **Shortwaves:** AGA-Baltic: Motala – Marconi: Hörby – **FM st's:** Marconi: Arvidsjaur, Boden, Bollnäs, Borlänge, Borås, Bäckefors, Emmaboda, Gäddede, Halmstad, Hörby, Laisvall, Lycksele, Malmö, Motala, Nässjö, Seitevare, Skellefteå, Skövde, Storuman, Strömstad, Sundsvall, Sunne, Tärnaby, Uddevalla, Visby, Vislanda, Vännäs, Västervik, Västerås, Östersund – Philips: Gällivare, Gävle, Göteborg, Haparanda, Hälsingborg, Karlskrona, Kiruna, Mora, Norrköping, Pajala, Sollefteå, Sveg, Täsjö, Uppsala, Varberg, Örebro, Örnsköldsvik – Siemens: Stockholm – Rohde & Schwarz: Stockholm.

IBRA RADIO AB (Non-Comm, Non-Go. Christian)

ADDR: Box 821, Stockholm 1 – **Studios:** The Main studio is Sveavägen 34, Stockholm. **Cable:** "Ibra-Radio" – **L.P:** Pres: Dr. Lewi Pethrus. Dir. Prgr: H. Carlsson.
STATIONS broadc. IBRA prgr's:
R. Bukawu, Congo: Sun (fortnightly) 16.45–17.00 in **French** on 4808kc 10kW – R. Litoral, Cochabamba, Bolivia: D 18.00–18.15 in **Spanish** on 6160kc 1.1kW – R. WIVV, Vieques, Puerto Rico: Thurs 00.30–00.45 in **English** on 1370kc 1kW – R. Riquelme, Coquimbo, Chile:

Sun in Spanish on 960kc 0.3kW – R. Paraguay, Asuncion: Wed 17.15–17.30 in Spanish on 1300/6015kc 1.5/1kW – R. Kanto, Yokohama: Sun in Japanese* on 1380/1450kc 10/3kW.
* The same prgr. is also broadc. over: R. Hokkaido, Hokkaido.
R. Corrientes, Corrientes, Argentina: Every Mon 12-min prgr. in Spanish – R.St. HCJB (The Voice of Andes): Every Wed in Swedish – R. Independencia, Montevideo, Uruguay: Three 15-min. prgr's a week in Spanish – R. WEBH, Chicago, USA: FM-broadcast in Swedish every Sun (R. Sweden) – PUB: "IBRA" in a Swedish and an English edition – F.PL: The plans of taking up the prgr's in the European languages again have in the nearest future possibility to become a reality. An offer of such a possibility has been made of a new sw-st, that is going to be built in Portugal. Its transmission is expected to start in 1965.

Advertisement:
IBRA RADIO FEDERATION is an international federation of listeners. Anybody can become a member of this federation. **"IBRA"**, the magazine is mailed to each member. The membership fee is: Sw. Crowns 30.–, US$ 10.– or Engl. £ 1. IBRA RADIO MISSION is an organ receiving gifts in favour of the Swedish free radiowork.

SWITZERLAND (Confederation)

L.T: GMT+1 h – **Pr.L:** German dialects, French, Italian, Romanche.

SWISS BROADCASTING AND TELEVISION CORPORATION

(A non profit making Comp.) – **FI:** By license fee.
ADDR: Schweizerische Radio- und Fernsehgesellschaft (SRG), Société Suisse de Radiodiffusion et Télévision (SSR), Società Svizzera di Radiotelevisione (SSR), Swiss Broadcasting and Television Corporation (SBC): Giacomettistrasse 1, Berne. **Cable:** Radif. **Te:** (031) 44.55.55 – **Schweizerischer Kurzwellendienst**, Service Suisse des Ondes Courtes, Swiss Shortwave Service: Giacomettistrasse 1, Berne – **Te:** (031) 44.66.44 – **Regional Centres: R. Zürich,** Brunnenhofstr. 20, Zürich – **R. Berne,** Schwarztorstr. 21, Berne – **R. Basel,** Novarsstr. 1, Basel – **R. Lausanne,** Maison de la Radio, La Sallaz, Lausanne – **R. Geneve,** 66 Boulev. Carl Vogt, Geneve – **R. Lugano,** Lugano-Besso.
L.P: Pres. of the Board of Adm: Dr. H. Oprecht (until Dec 31st 1964). Dir. Gen: M. Bezençon. Head of Adm. and Deputy Dir. Gen: D. Carl. Dir. Swiss s.w. Sce: Dr. G. H. Padel. Deputy Dir. Swiss s.w. Sce: J. Curchod. Head of the Editorial Dept. in Swiss s.w. Sce: Dr. H. de May. Head of "Prgr. Operations": L. Tschannen. Dir. Swiss TV: E. Haas.
Managers of the Regional Centres: Beromünster: Studio Zürich: Dr. S. Bächli. Studio Berne: M. Bolliger. Studio Basel: Dr. F. Ernst. **Sottens:** Studio Lausanne: J. P. Méroz. Studio Genève: R. Aubert. **Monte Ceneri:** Studio Lugano: Dr. S. Molo.

HOME SERVICE

GERMAN:
First Prgr: Sun 06.45–22.15, Mon–Fri: 05.15-07.30, 10.00-22.15, Sat 05.15-22.15.

	kc	m	kW		kc	m	kW
Beromünster	529	567.1	150	Coire	1562	192.0	0.5
Basel	1562	192.0	0.5	Sool	1562	192.0	0.5

FM: Relay Beromünster:

	ch	Mc	kW/W		ch	Mc	kW/W
Attinghausen	28	95.3	0.1	Ladir	16	91.9	1.125
Brig	23	93.9	0.5	Leuk	20	93.0	0.75
Brusio	2	87.6	6W	Niederhona	34	97.2	9
Buchserberg	15	91.6	0.25	Poschavio	4	88.2	12W
Celerina	33	96.0	0.75	St.Chrischona	12	90.6	18
Davos	29	95.7	0.22	Sta. Maria	20	93.0	30W
Dél	27	95.1	0.75	Säntis	43	99.9	10
Ernen	40	99.0	2	Sils	29	95.7	36W
Geissholz	28	95.4	0.75	Sool	26	94.8	0.75
Gotschnagrat	8	89.4	1.2	Tarasp	27	95.1	0.5
Gurtnellen	30	96.0	90W	Uelitberg	25	94.6	1.8
Hornfluh	3	87.9	0.75	Valzeina	11	90.3	0.75
Klewenalp	27	95.0	22.5W				

Symphony: Tues 19.00 – **N, Wrp:** 05.15, 06.00(Sun 06.50), 11.30, 18.30, 21.15 – **Commentary:** 18.40 (18.00: Current N – Items non-political) – Fri 18.00: **"World Chronicle"**, Mon 21.20: **Review for Swiss Abroad** – **Mbg:** Mon 19.30 – **Im Auto durch die Schweiz** for motorists W 06.30–07.30.

Second Prgr: D 18.00–21.15. Sun approx. 12.20–21.15. **Local broadc. in Romanche:** Sun 11.40–12.00 prgr. for farmers; every third week: Sun 08.15 (Sermon); Fri 16.00–16.30 (Children's h, prgr's for the women, sick and elderly people); 19.00-19.30 (Current N – Items).

Local broadc. in German: Sun 17.30–18.00.

FM:	ch	Mc	kW/W		ch	Mc	kW/W
Bantiger	21	93.2	60	Ladir	31	96.4	1.125
Brig	8	89.4	0.5	Leuk	36	97.8	0.75
Buchserberg	33	96.9	0.25	Niederhorn	22	93.6	9
Celerina	3	87.9	0.75	St.Chrischona	40	99.0	18
Davos	3	87.9	0.22	Sta. Maria	6	88.8	30W
Dél	38	98.4	0.75	Säntis	28	95.4	10
Ernen	28	95.4	2	Sils	23	93.9	36W
Geissholz	4	88.2	0.75	Sool	40	99.0	0.75
Gotschnagrat	36	97.8	1.2	Tarasp	15	91.5	0.5
Gurtnellen	15	91.5	90W	Uelitberg	35	97.5	1.8
Hornfluh	30	96.0	0.75	Valzeina	41	99.3	0.75
Klewenalp	11	90.3	22.5W				

FRENCH:
First Prgr: Sun 06.10–22.15, Mon+Wed 06.00–13.00, 14.59–22.15, Tues+Thurs 06.00–07.30, 10.00–13.00, 14.49–22.15, Fri 06.00–22.15, Sat 06.00–23.00.
Sottens 764kc 392.6m 150kW Savièse 1367kc 219.5m 0.5kW

FM: Rel. Sottens:	ch	Mc	kW		ch	Mc	kW
Hornfluh	38	98.4	0.75	Les Ordons	24	94.2	1.5
La Chaux de Fonds	31	96.3	1.5	Leuk	4	88.2	0.75
La Dôle	26	94.8	45	Ravoire	41	99.3	1.2

Symphony: Wed 19.30, Thurs 20.30 – **N, Wrp:** 06.15, 11.45, 18.15, 21.30 – **Commentary:** 17.30 "Le micro dans la vie", 18.00 "La Suisse au micro", 18.25 "Le miroir du monde" (Fri: La situation internationale) – Sat 07.30–11.00 **"Route Libre"** for motorists.

Second Prgr: W 19.00–21.30 (Fri 22.15, Sat 22.00), Sun 13.00–21.30.

FM:	ch	Mc	kW		ch	Mc	kW
Hornfluh	15	91.5	0.75	Les Ordons	42	99.6	1.5
La Chaux de Fonde	2	87.6	1.5	Leuk	11	90.3	0.75
La Dôle	14	91.2	45	Ravoire	29	95.7	1.2

ITALIAN: First Prgr: Sun 07.00–22.15, Mon–Thurs 06.00–07.30, 10.00–13.00, 14.59–22.15 Fri 06.00–07.30, 10.00–22.15, Sat 06.00–22.15.
Monte Ceneri 557kc 538.6m 50kW.

FM: Rel. Monte Ceneri:

	ch	Mc	kW/W		ch	Mc	kW/W
Brusio	15	91.5	6W	M. S.Salvatore	39	98.7	12
Grono	42	99.6	1	Peccia	4	88.2	0.1
M. Ceneri	33	96.9	0.75	Pizzo Matro	36	97.8	0.75
M. Morello	31	96.3	0.75	Poschavio	23	93.9	12W

Symphony: Thurs 19.30 – **N, Wrp:** 06.15 (Sun 07.15), 11.30, 18.15, 21.30 – **Commentary:** 18.20 – **Mbg:** Sun 13.15 – Sat 08.30 No-Stop (for motorists).

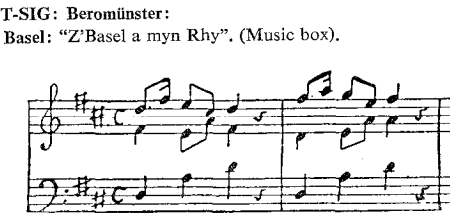
Second Prgr: W 18.00–21.30, Sun 14.15–16.15, 19.00–21.30.

FM:	ch	Mc	kW/W		ch	Mc	kW/W
Grono	26	94.8	1	M. San Salvatore	20	93.0	12
M. Ceneri	8	89.4	0.75	Peccia	23	93.9	0.1
M. Morello	6	88.8	0.75				

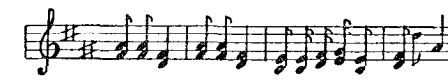
JOINT PRGRS: (Beromünster, Sottens, Monte Ceneri): W 10.00–11.00 (First Prgr.), 18.00–19.00 (Second Prgr.)

ANN: Swiss National tr's – First Prgr's: Beromünster: "Hier sind der Schweizerische Landessender Beromünster und die deutschschweizerischen UKW-Sender". **Sottens:** "Radiodiffusion suisse, programme romand". **Monte Ceneri:** "Radio della Svizzera italiana, Stazione nazionale di Monte Ceneri, Studio di Lugano".

INT-SIG: Beromünster:
R. Basel: "Z'Basel a myn Rhy". (Music box).

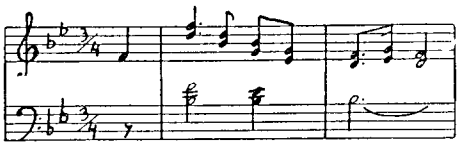


R. Bern: "D'Zyt isch do" (Music box).

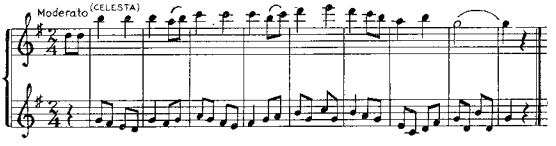


Switzerland

R. Zurich: "Chumm Bueb und lueg dis Ländli a". (Celeste)



Sottens: Radiodiffusion Suisse, Programme romand: Melody by Achille Christen (Celesta):



Monte Ceneri: "Campane della Chiesa di Pazzalino" (disk/record).

V. Any messages from our listeners and viewers are most welcome. Both QSL-card and letter are used – PUB: "Radio+Fernsehen". Schweizer Radio-Zeitung. "Radio TV – Je vois tout". "Radiotivù". Prgr.sched. for Shortwave Sce. twice a year.

Brown Boveri, Switzerland: Mw-tr's: 250kW (Beromünster), 25kW (Monte Ceneri) – Sw-tr's: 2×250kW (Beromünster), 2×250kW (Schwarzenburg).
Wilhelm Franz KG, Germany, delivered EMT studio equipment.

FOREIGN SERVICE

Schwarzenburg: 100kW (output power)

kc	m	kc	m	kc	m	kc	m
6080	49.34	7220	41.55	9670	31.02	17795	16.86
6105	49.14	9535	31.46	11715	25.61	17820	16.84
6120	49.02	9595	31.27	11810	25.40	17845	16.81
6165	48.66	9655	31.07	11865	25.28	21520	13.94
7110	42.19	9665	31.04	15305	19.60		

(As of November 1, 1964, subject to later changes).

EUROPEAN AND OVERSEAS SERVICE

I=Europe; II=Africa; III=Japan/China; IV=Australia/New Zealand/So. Ea. Asia; V=Spain/Portugal; VI=UK/Ireland; VII=India/Pakistan; VIII=No. America (West); IX=Near & Middle East; X=So. America; XI=No. America (East); XII=Ce. America.

Times	Areas	kc	Languages
05.45–06.45(W)	I/II	°6165/°9535 11715/15305	German/ French/
06.45–13.00(Sun)	I	°6165/°9535	Italian
07.15–08.45	III	9670/17820/21520	English/*
09.00–10.30	IV	15305/17820/ 21520	English/*
10.45–11.45	V	°7110/9665	Spanish
11.00–13.00	I/II	°6165/°9535/ 17795	German/French/ Italian
12.00–13.00	VI	7110/9665	English
13.15–14.45	VII/II	9535/11865/ 17795/17845	English/*
15.00–16.30	VIII	15305	English/*
15.00–17.00	IX	9535/9665/11865	English/*/Arabic
17.15–20.15	II	9595/9665/ 11715	Arabic/French/*/ English/Portuguese
17.30–22.45	I	°6165/°9535	German/French/
20.15–22.45	II	11715	Italian
20.30–22.30	V	°7220/9665	Spanish/Portuguese/*
23.00–01.00	X	6165/9535/ 9655/11810	Portuguese/*/ Spanish
01.15–02.45	XI	6080/6105/9535	English/*
03.00–04.00	XII	6120/6165/ 9535/9655	Spanish

° non directional; * For the Swiss abroad: "Reflects Suisses" (in French) Mon, Thurs; "Schwizerspiegel" (in Swiss-German) Tues, Fri; "Prisma Swizzero" (in Italian) Wed, Sat.

PRGR'S FOR EUROPE AND AFRICA

Non-directional tr. on 6165/9535kc.
German, French, Italian: W 05.45–06.45, 11.00–13.00, Sun 06.45–13.00, D 17.30–22.45 (see also Prgr's for Africa, directional rebroadc.)
N (German): W 06.00, Sun 06.45, D 11.30, 18.30, 22.00. **French:** W 06.15, Sun 07.00, D 11.45, 18.15, 21.30. **Italian:** W 06.30, Sun 07.15, D 12.00, 22.30.
Prgr's for Swiss Abroad: W 12.30–13.00, 17.30–18.00 (French: Mon, Thurs, Swiss-German: Tues, Fri, Italian: Wed, Sat) – **Esperanto:** 12.10 Mon, Wed, 21.15 Thurs, Sat.

PRGR'S FOR AFRICA

English: 60 min W, 90 min Sun – 13.15 on 17845/17795kc – W 18.45, Sun 18.15 on 9595/9665/11715kc (details under "Prgr's in English"). **French:** 30 min D – 17.45 on 9595/9665/11715kc – **T.S, N:** D – Features: **"Page de la vie du monde"** (Political Commentary): Mon–Fri – **"Le monde cette semaine"** (weekly internat. review): Sat – **"Musique de ce temps"** (Music of our time): Sun – **"Boite postale, Berne 16"** (Mailbag): Mon – **"Bonsoir l'Afrique"** (Topical reports): Tues, Wed, Fri, Sat – **"La Suisse chante et danse"** (Swiss folk music): Thurs – **"Problemes de ce temps"** (Problems of our time): Sun.
Portuguese: 30 min D – 19.45 on 9595/9665/11715kc (details under "Prgr's in Portuguese").
Arabic: See "Prgr's in Arabic".
German, French, Italian (directional rebroadc. of European Prgr): W 05.45–06.45 on 11715/15305kc, W 11.00–13.00 on 17795kc, D 20.15–22.45 on 11715kc, Sun 11.00–13.00 on 17795kc (see also non-directional tr's under Prgr's for Europe and Africa).

PRGR'S IN ARABIC

60 min D – 16.30 on 9535/9665/11865kc – 17.15 on 9595/9665/11715kc. **All tr's** begin with T.S. and N – Features: **"Music for you":** Mon – **"Switzerland as it is":** Tues – **Mailbag:** Wed – **"Art in Switzerland":** Thurs – **"Let's play":** Fri – **Musical requests:** Sat – **Internat. Red Cross Prgr:** Sun.

PRGR'S IN ENGLISH

Each tr. 60 min. W, 90 min. Sun – 07.15 on 9670/11865/15305kc – 09.00 on 15305/17820/21520kc – 12.00 on 7110/9665kc – 13.15 on 9535/11865/17845/17795kc – 15.00 on 9535/9665/11865kc and on 15305kc – W 18.45 (Sun 18.15) on 9595/9665/11715kc – 01.15 on 6105/6080/9535kc.
Prgr's in all tr's:
N: 3 min. after beginning of each tr – Regular features: **"Echoes from Switzerland"** (Topical Events/The Work of Internat. Organizations/Swiss Partnership/Econ. Notes and Talks): Mon–Fri – **"The Burri Family"** (Samples of the Swiss Way of Life) or **"Double Exposure"** (Masters in two contrasting fields): Mon (alternating) – **"Swiss Gazette"** (Life and People): Tues – **"Melody Train"** (request prgr): Wed, Sun – **"Jazz Panorama"** Thurs – **"My Favourite Spot"** (members of SBC's English Service describing their "Favourite Spot" in Switzerland): Fri – **"Swiss Short-wave Merry-go-round"** (entertainment and information for SWLs, HAMs and DXers): Sat 07.45, 09.30, 12.30, 13.45, 15.30, 19.15, Sun 01.45 – **"Swiss Sunday Special"** (Bells of Switzerland, Religious Talk, "Melody Train", "SBC Mailbag", "Swiss Quiz" etc): Sun.

PRGR'S IN SPANISH

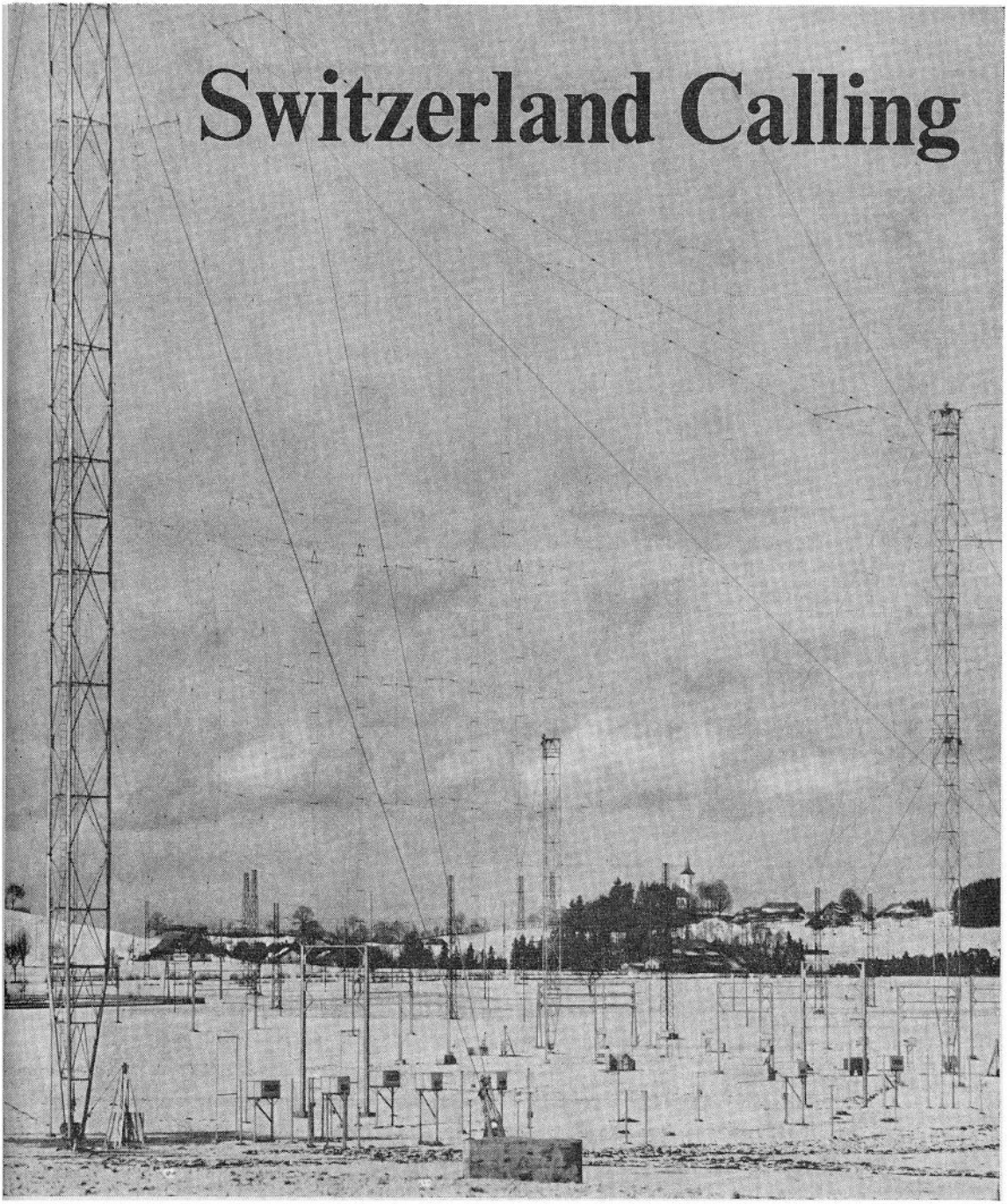
Each tr 60 min D: 10.45 on 7110/9665kc – 20.30 on 7220/9665kc – 00.00 on 9535/9655/6165/11810kc – 03.00 on 6120/6165/9535/9655kc. **All tr's** begin with T.S,, N and Political Commentary, followed by regular features: **"Combinado musical"** (Musical cocktail): Mon – **"Pagina feminina"** (Women's page): Mon – **"Pinceladas de actualidad"** (Topical reports): Tues, Thurs – **"Compositores suizes"** (Swiss composers): Tues – **"Apuntes economicos"** (Economic Notes & Talks): Wed – **"Bailables"** (Request Prgr): Wed, Sat – **"Novedades de la discoteca"** (new records): Wed – **"Tribuna de los jovenes"** (Students in Switzerland) or **"Por las aulas suizas"** (Swiss Schools): Wed – **"Musica sinfonica"** (Symphonic music): Wed – **"Ecos de Suiza"** (Echoes from Switzerland): Sat – **"Discos al dia"** (Topical records and reports): Sun – **"Viajeros illustres"** (famous travelers) or **"Invierno en Suiza"** (winter in Switzerland): Sun.

PRGR'S IN PORTUGUESE

Each tr 30 min. W, 60 min Sun – 19.45 on 9595/9665/11715kc – 21.30 on 7220/9665kc – 23.00 on 6165/9535/9655/11810kc.
All tr begin with T.S. and N – Features: **"Actualidade Internacional"** (Polit, Commentary): Mon, Tues, Wed, Fri – **"Musica Popular Suiça"** (Swiss Folk Music): Mon, Tues, Wed – **"Economica em Foco"** (Economic Highlights): Thurs – **"Encontro Musical"** (Musical encounter): Fri – **"Revista da Semana"** (Magazine): Sat – **"Ecos da Suiça"** (Echoes from Switzerland) and **"Lembranças da Suiça"** (request prgr): Sun.
ANN: E: "This is Switzerland Calling" – G: "Hier spricht die Schweiz" – F: "Ici la Suisse" – I: "Qui è la Svizzera" – Sp: "Habla Suiza" – P: "Aqui Suiça" – Arabic: "Huna Swisra".

Your help is needed . . .
to make the WRTH even better, and that is why we ask all of our readers—listeners and radio-stations—to send in corrections and new schedules, thus enabling us to offer you an **improved** WRTH 1966 . . .

Switzerland Calling



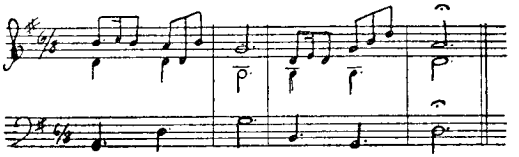
Directional shortwave aerials of the Swiss Broadcasting Corporation at Schwarzenburg, 15 miles south of Berne

SBC broadcasts daily in English, German, French, Italian, Spanish, Portuguese and Arabic

World News and Commentaries – Features and Request Programmes – Country Music – Classical Concerts – Special Programmes for DX-ers and jazz fans. For full details se page 138.

"Switzerland Calling", SBC's illustrated programme schedule, is published in spring and autumn and may be obtained free from: SBC – European and Overseas Service, 3000 Berne 16, Switzerland

INT-SIG: "Luegit vo Bärg und Tal" (trad. German-Swiss folk song), played on music-box.



V. Correct reports to SBC, 3000 Berne 16, Switzerland, verified by QSL-card or letter. 1RC if airmail reply required – PUB: Prgr.schedule "Switzerland Calling" (twice a year, spring and autumn), reports cards and report sheets (airletters) free upon request.

BROADCAST FROM THE INTERNATIONAL COMMITTEE OF THE RED CROSS, GENEVA

ADDR: R. Geneva, 66 Blvd. Carl Vogt, Geneva – L.P: Dir: Gen. G. Kuhne.

In Peace time: ICRC organizes occasional test transmissions (4 times a year) on the frequency of 7210kc 41.61m by courtesy of Swiss Short Wave Service at the following hrs: 06.00–07.00, repeated at 11.30–12.30, 15.00–16.00, 21.00–22.00 in **French, German, Italian, English, Spanish, Arabic** (each 10 min's) – Prgr's consist of ICRC-actualities and tracing service. **In Times of Crisis:** ICRC broadcasts programmes containing information regarding prisoners of war and civilians on the same frequency as well as on others lent by the Swiss authorities, up to 12 hours per day – ANN: **Arabic:** "Huna Geneve". **E:** "This is R. Inter-Red-Cross calling". **F:** "Ici R. Inter-Croix-Rouge". **G:** "Hier R. Inter-Rot-Kreuz". **I:** "Qui R. Inter-Cruce-Rossa". **Sp:** "Aqui R. Inter-Cruz-Roja". V. by QSL-card. Records accepted.

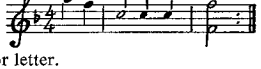
UNITED NATIONS BROADCASTING FROM GENEVA

FI: by the UN Organization – ADDR: R. des Nations Unies, Palais des Nations, Geneva. **Cable:** Omnipress. **Te:** 33.10.00. Ext. 2315/2566. L.P: Dir. Inf: H. Samper. Chief R. Operations: R. Nivelle.

FOREIGN SCE: 7443kc 40.31m 25kW: Fri: 17.00–17.10 UN prgr. in **Russian** (USSR) Mon 19.20–19.35 UN prgr. in **Arabic** (to No. Africa M. East) on 6010/7290/9575kc (via R. Roma). During general Assembly sessions, these prgr's are transmitted daily. Monthly, on Mon at mid-month over Sottens 21.35 (R. Suisse Romande) "Le Tour du Monde des Nations Unies" (30 minutes) then by transcription to 25 different countries which broadc. in French.

ANN: E: "This is the United Nations R. in Geneve". F: "Ici les Nations Unies à Genève".

INT-SIG:



V. by QSL-card or letter.

U.S.S.R.

L.T: See time table **Pr.L:** Russian, Ukrainian, Byelorussian, Uzbek, Tatar, Kazakh, Azerbaidjanian, Armenian, Georgian, Lithaunian, Moldavian, German, Estonian, Latvian, Chuvash, Tadjik.

STATE COMMITTEE FOR BROADCASTING AND TELEVISION (Go.)

ADDR: Pjatnitskaja ulitza 25, Moscow. **Cable:** Moskva Radio. Te: 33-63-56.

L.P: Pres. of Broadc. Committee: N. N. Mesyatsev 1st Vice-Pres: E. N. Mamedov. Vice-Pres. (TV): V. I. Tjernysev. Vice Pres. (Radio): A. A. Rapokhin. Vice Pres. (constr): L. S. Maksakov. Dir. Tec. (Radio): V. F. Zielesova. Chief Foreign Relations: H. A. Sarkisov.

STATIONS:

LONG & MEDIUM WAVES:

Station	kc	m	kW	H of tr.
Moscow I (RSFSR)				
1st prgr.	151	1987	50	02.00–12.00, 13.00–22.00 (Sat/Sun 02.00–23.00)
Petropavlovsk (RSFSR)	155	1935	10	01.00–06.00, 08.00–11.00 18.35–21.00
Tashkent (Uzbekistan)	164	1829	50	00.00–09.00, 10.00–22.00
Moscow II (RSFSR)	173	1734	500	02.00–01.00 2. prgr.
Chita (RSFSR)	173	1734	20	22.05–16.20
Alma-Ata (Kazakhstan)	182	1648	50	00.30–21.03
Tbilisi (Georgia)	191	1571	50	01.45–10.00, 13.00–21.03
Irkutsk (RSFSR)	200	1500	100	22.00–03.00, 04.00–19.00
Moscow III (RSFSR)	200	1500	100	08.30–13.30 3. prgr.
Kiev I (Ukraine)	209	1435	150	01.55–12.00, 13.00–23.00
Baku (Azerbaijan)	218	1376	50	01.55–10.05, 12.55–22.00
Krasnoyarsk (RSFSR)	218	1376	50	23.00–08.00, 09.00–18.00
Tselinograd (Kazakhstan)	227	1322	50	as 182kc
Leningrad I (RSFSR)	236	1271	100	as 151kc 1. prgr.
Magadan (RSFSR)	236	1271	20	18.00–13.00
Vladivostok (RSFSR)	245	1224	100	23.00–14.00
Dushanbé (Tajikistan)	254	1181	50	23.52–09.00, 11.00–21.03
Kazan (Tatar ASSR)	254	1181	100	02.00–21.03
Yakutsk (Yakutsk ASSR)	263	1141	10	22.00–01.55, 02.00–16.00
Moscow I (RSFSR)	263	1141	150	02.00–11.00, 12.00–22.00 (Sat/Sun 02.00–22.00) 1 prgr.
Novosibirsk (RSFSR)	272	1103	100	23.00–07.00, 09.00–19.00
Minsk II (Byelorussia)	281	1068	100	02.00–12.00, 13.00–22.00
Ulan-Ude (Buryat ASSR)	281	1068	10	22.25–01.30, 03.30–16.30
Khabarovsk (RSFSR)	335	896		19.30–10.45
Saratov (RSFSR)	340	882.4	100	16.00–22.00 2. prgr.
Yuzno-Sakhal (RSFSR)	360	883	100	19.25 21.45, 01.00–11.30
Yerevan (Armenia)	362	828.7	50	01.55–10.00, 12.50–21.03
Ashkhabad (Turkmenia)	375	800	10	00.55–09.00, 12.00–21.03
Moscow III (RSFSR)	385	779	50	15.00–20.00 3. prgr.
Moscow IV (RSFSR)	395	359.5	100	19.00–15.00
Tashkent II (Uzbekistan)	400	750	50	00.00–21.03
Minsk II (Byelorussia)	400	750	50	02.00–21.03
Odessa (Ukraine)	548	547	100	03.00–22.00 2. prgr.
Vladivostok (RSFSR)	548	547.4	100	08.00–15.30, 21.00–23.00
Volgograd (RSFSR)	557	539	10	
Riga I (Latvia)	575	521.7	100	02.58–12.00, 13.00–22.00
Frunze (Kirghizia)	611	491	25	00.00–17.00
Petrozavodsk (Kar. ASSR)	611	491	100	03.00–10.00, 13.00–22.00
Krasnodar (RSFSR)	611	491	20	
Vladivostok (RSFSR)	629	476.9	100	08.00–15.30, 21.00–22.00
Simferopol (Ukraine)	647	464	100	01.55–12.00, 13.00–21.03
Murmansk (RSFSR)	656	457.3	150	03.00–12.00, 13.00–22.00
Vilnius (Lithaunia)	665	451.1	100	02.00–12.00, 13.00–23.00
Tsjernovtsy (Ukraine)	674	445.1	100	03.00–12.00, 13.45–22.00
Ufa (Bashkir ASSR) 2. prgr.	692	433.5	100	07.00–12.00, 15.00–21.00
Donetsk (Ukraine)	710	422.5	150	02.00–11.00, 13.00–21.03
Tallinn (Estonia)	710	422.5	150	03.00–23.00
Chelyabinsk (RSFSR)	737	407.1	10	00.55–10.20, 12.20–21.03
Moscow II (RSFSR) 2. prgr.	737	407.1	20	06.00–12.00, 16.00–20.00
Tselinograd (Kazakhstan)	746	402	20	00.00–21.03
Odessa (Ukraine)	764	392.7	10	01.55–12.00
Kiev II (Ukraine)	782	383.6	100	01.55–12.00, 13.45–17.30
Karaganda (Kazakhstan)	782	383.6	20	00.00–17.00
Leningrad II	800	375	100	03.00–12.00, 13.00–17.30
Dushanbé (Tadjikistan)	800	375	100	12.00–18.30
Kuibyshev (RSFSR) 2. prgr.	809	371	10	04.00–13.00, 15.00–22.00
Gorkij (RSFSR)	827	363	20	16.00–22.00 2. prgr.
Kharkov (Ukraine)	836	358	20	17.00–21.03
Kazan (Tatar ASSR)	845	355	10	03.00–11.00, 13.00–22.00
Yerevan (Armenia)	863	347.6	100	02.00–11.00, 11.50–22.05
Moscow (RSFSR)	872	344	150	02.00–01.00 (2+3. prgr.)
Stavropol (RSFSR)	881	340	20	03.00–12.00, 13.00–21.03
Ushgorod (Ukraine)	890	337.1	50	01.55–12.00, 13.00–23.00
Makhachkala (Dhagestan)	917	327.2	50	03.00–12.00, 13.00–21.00
Lvov (Ukraine)	935	320.9	300	17.00–21.00 1. prgr.
Voronej	944	318	20	
Smolensk (RSFSR)	971	309	150	06.15–11.00(Mon 12.00) 1. prgr.
Yuzhno-Sakhal (RSFSR)	973	308	20	19.25–21.45, 01.00–13.05
Kishinjov (Moldavia)	998	300.6	100	02.00–11.00, 12.43–00.30
Tallinn I (Estonia)	1034	290.1	100	02.55–21.03
Tbilisi (Georgia)	1043	287.6	100	01.45–06.00, 13.00–21.03
Dnjepropetrovsk(Ukraine)	1070	280.4	20	03.00–12.00, 13.00–21.03
Perm	1088	275.5	20	01.00–21.03
Vilnius II (Lithuania)	1106	271.2	100	02.00–11.00, 13.00–21.03
Moscow I (RSFSR)	1115	269.1	50	03.00–22.00 1. prgr.
Leningrad III (Vyborg)	1124	266.9	20	03.00–12.00, 13.00–23.00
Kaliningrad	1142	262.7	20	03.00–22.00 2. prgr.
Vladivostok (RSFSR)	1151	260.9	100	08.00–14.30
Kiev (Ukraine)	1169	256.6	150	15.30–00.30
Kursk (RSFSR)	1214	247.1	20	
Tallinn II (Estonia)	1214	247.1	20	02.55(Sun 03.55)–23.00
Tiraspol (Ukraine)	1241	241.7	50	16.00–24.00
Moscow III	1277	234.9	20	01.00–21.03
Khabarovsk (RSFSR)	1250	240	100	21.00–24.00, 08.30–15.30
Kharkov	1322	226.9	100	
Tallinn (Estonia)	1331	225.4	20	02.55(Sun 03.55)–21.03
Kuldiga (Latvia)	1349	222.4	20	
Madona (Latvia)	1349	222.4	20	03.00–21.03, 21.05–22.00
Valmiera (Latvia)	1349	222.4	20	
Moscow II	1367	219.5		03.00–22.00
Kaunas (Lithuania)	1385	216.6	150	22.30–03.00 (2. prgr.), 16.00–21.05

The Broadcasting House in Moscow

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TUNE IN TO RADIO MOSCOW!

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TIMES AND WAVELENGTHS MAY BE FOUND ON PAGE 143 IN THIS HANDBOOK

Tartu (Estonia)	1403	213.8	20	02.55(Sun 03.55)–21.03
Riga (Latvia)	1421	211.1	10	03.00–22.00
Tallinn (Estonia)	1493	200.9	50	16.30–00.30
Gomel (Ukraine)	1493	200.9	20	02.00–11.00
Vinnitsa (Ukraine)	1546	194	50	15.30–21.30
Baranovitchi (Byelorussia)	1554	193	20	

FM Stations:

Station	Mc		Mc		Mc
Moscow I	67.22	Leningrad II	66.8	Tartu II	71.9
Moscow I	69.77	Tallinn I	67.3	Kothla-Järve	71.1
Moscow II	66.4	— II	70.8	—	68.1
Leningrad I	70.4	Tartu I	69.7	Vilnius I	70.1
				Vilnius	81.2

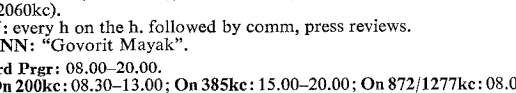
Shortwaves: For R. Moscow and Regional shortwave st's: please refer to the pages: Short Wave Stations of the World.

HOME SERVICES

RADIO MOSCOW:
First Prgr: 02.00–22.00.
On 151/236kc: 02.00–12.00, 13.00–22.00 (Sat/Sun 02.00–22.00); **On 263kc:** 02.00–11.00, 12.00–22.00(Sat/Sun 02.00–22.00); **On 935kc:** 17.00–21.00; **On 971kc:** 06.15–11.00(Mon 12.00); **On 1115kc:** 03.00–22.00 – **On 4055kc:** 16.00–20.00; **On 4860kc:** 04.00–06.00, 14.30–22.00; **In 49mb** (5900–6165kc)/**41mb** (7350–7440kc): 02.00–22.00; **In 31mb** (9470–9780kc): 05.00–22.00; **In 25mb** (11820–12070kc): 03.00–15.30. **N:** 02.02, 03.30, 05.00, 09.00(W), 15.00, 19.00 – **Press Review:** 02.03 (D exc. Mon), 04.00 (Pravda), 06.00, 15.20 (Isvestiya).

2nd Prgr. ("Majak"-Lighthouse): 24 h.
On 173kc: 02.00–01.00; **On 340/827kc:** 16.00–22.00; **On 548/1142/1367 kc:** 03.00–22.00; **On 692kc:** 04.00–12.00, 15.00–21.00; **On 737kc:** 06.00–12.00, 16.00–20.00; **On 809kc:** 04.00–13.00, 15.00–22.00; **On 872kc:** 02.00–08.00; 20.00–01.00, **On 1385kc:** 22.30–03.00; Also 24 h in the 49(5950–6200)/41(7100–7350)/31(9470–9800)/25mb (11700–12060kc).
N: every h on the h. followed by comm, press reviews.
ANN: "Govorit Mayak".

3rd Prgr: 08.00–20.00.
On 200kc: 08.30–13.00; **On 385kc:** 15.00–20.00; **On 872/1277kc:** 08.00–20.00; **On 5455kc:** 13.30–20.00; **On 6200kc:** 15.20–20.00; **On 7290kc:** 15.00–20.00; **In 31mb**(9530–9670kc): 08.00–20.00; **On 11570kc:** 08.00–14.00
***4th Prgr.** (for East Siberia/Far East): 19.00–15.00 in 49(5920–6135)/41(7100–7440)/ 31(9375–9810)/ 25mb(11805–12060kc).
N: 19.00, 20.00, 21.00(Sun 22.00).
***5th Prgr.** (for West Siberia): 23.00–19.00 on 5960/5970/7195/7330/9715/11720/11915kc – **N:** 00.02, 02.02, 03.00(W), 09.00(W), 15.00.
* relayed by the local st's in these areas.
Prgr. in German for Siberia, Altai, Kazakhstan, Ural: D 01.20–02.00 on 692(Ufa)/737kc(Chelyabinsk) and in 31mb (N, Prgr); 12.05–12.25 (Mon–Fri) on 151kc and in 19mb (to Altai, Siberia), and 25mb (to Ural, C. Asia), Press review and N.
ANN: R: "Govorit. (name of station: Moskva, Alma-Ata, Baku, Leningrad, Tashkent etc)", G: (R. Moscow) "Hier ist Moskau mit seiner Sendung für die sowjetdeutsche Bevölkerung".
INT-SIG: For Home Foreign Service:



PUB: "Radioprogrammy" (weekly) and "Televidenye" (weekly).

REGIONAL STATIONS:

R. ALMA-ATA – L.P: Pres: K. N. Shabalayev.
1st Prgr. in Kazakh, Russian, German, Uighurs: 00.00–14.00 on 182/4544/5260/6180/5970/9250/9380/10530kc (01.00–02.00 not on 9250), 14.00–21.03 on 182/5260/6180/9380/10530 (only until 19.00)kc.
N: Kazakh: 00.03, 02.00, 07.25, 10.30(W), 14.00(W), 12.30(Sun). Russian: 00.06, 02.07, 07.35, 12.40(Sun), 14.10(W) – **Wrp:** 01.35, 10.38(W) –
Kazakh music: 04.15, 09.10, 13.00, 13.10(Sat) – **Concert:** 05.15, 07.00, 07.40 –
German: Mon, Wed, Fri 12.00–12.30(also rel. by Kustanai, Dzetygara)
Uighurs: Tues, Thurs, Sat 12.00–12.30.
Rel R. Moscow: 00.30(Sun 01.00)–01.30, 03.00–04.15, 05.30–06.15, 11.30–12.00(Sun 11.00–12.00), 12.30–13.00(W), 14.00–15.00(Sun), 16.00–21.03(incl. N from Moscow: 01.00, 02.00, 05.00, 09.00(W), 15.00, 19.00).

2nd Prgr. "Selskaya jizn" (for farmers): 01.00–02.00 on 227/9250kc, 14.00–18.00 on 746/4544/9570/9250kc in **Kazakh or Russian** (14.00–16.00 & 16.00–18.00) alternating each day – **N:** 01.00 (Kazakh), 14.00, 16.00, – **ANN:** "Govorit radioyaistuns selskaya jizn".
FM prgr: 69.6Mc: 13.00–18.00.
German: Thurs 15.30–16.00 – **Uighurs:** W 13.02–14.00 –
Local Prgr: W 13.00–13.30 on 4544kc/69.6Mc – **ANN:** Kazakh: "Almaty Seylepturghan". Russian: "Govorit Alma-Ata". German: "Hier ist R. Alma-Ata" – **INT-SIG:** Kazakh folk song (1st prgr). Electronic music (2nd prgr). Re. from Kazakhstan only.

R. TSELINOGRAD (Kazakhstan)
Home Sce. in Russian, Kazakh, German on 227/782kc: 00.00–21.03. Own prgr's: D 01.45–02.00 (N, Press review), 02.15–03.00, 12.00–14.00 (N, prgr) – **German:** Fri 12.00–12.30 (N prgr) – Other times rel. Alma-Ata – **ANN:** (G): "Hier ist Zelinograd. Hören Sie unsere Sendung für die deutsche Bevölkerung der Neulandregion!"

R. ASHKHABAD L.P: Pres. Y. Khodshayev.
Home Sce. in Turkmenian, Russian: 01.15–09.00, 12.00–21.03 on 375/4825kc. **Turkmenian:** 01.15–02.00, 02.30–05.00, 08.00–09.00, 12.00–18.00. **Rel. R. Moscow:** 02.00–02.30, 05.00–08.00, 15.30–16.00, 18.00–21.03 (incl. N. at 02.03, 03.03, 04.00, 05.00, 15.00, 19.00).

R. BAKU in Azerbaidjan, Russian, Armenian:
1st Prgr: D 01.55–11.00, 12.30–22.00 on 218kc/67.7/72.3Mc. 01.55–04.00, 05.00–11.00 also on 4958/9490kc.
N: Azerbaidjan: 02.00, 09.00, 12.30, 15.00, 19.15 – **Prgr. in Russian:** 09.00–09.30, 13.40–14.05. **N:** 06.45, 16.10, 18.15 – **Prgr. in Armenian:** 07.15–08.00. **N:** (Rel. R. Yerevan) 15.40 – **Rel. R. Moscow:** 03.00–04.00, 04.45–06.00, 09.30–11.00, 19.00–19.30, 20.00–22.00 (incl. N: 03.02, 04.00, 16.00, 19.00, 21.03).
2nd Prgr: On 4958kc 14.00–20.00 – **3rd Prgr:** On 70.9Mc 09.00–14.00.
ANN: Azerbaidjan (Home & Foreign Sce): "Danishir Baku".

R. CHELYABINSK: Home Sce. in Russian, Kazakh, German: On 737kc: 00.55–10.30, 12.30–21.00. Own Prgr's: 02.00–03.00, 03.30–04.00, 14.00–17.00 – **N: Russian:** 02.00, 14.00. **Kazakh:** 03.30, 16.30 – **Rel. R. Moscow:** 01.00–02.00, 03.00–03.30, 04.00–10.30, 12.05–14.00, 17.00–21.00 (incl. N. 01.00, 03.03, 04.00, 05.03, 10.00, 13.00, 19.00. **German:** 01.20–02.00 (N, Prgr.).

R. FRUNZE–L.P: Pres. A. U. Botokhanova.
Home Sce. in Kirghize, Russian, German. On 611/4008kc: 00.00–21.03. Own Prgr's: 00.00–01.00, 02.15–03.45, 05.10–11.30, 12.00–12.35, 13.05–17.00. **Rel. R. Moscow:** 01.00–02.15, 12.35–13.05, 17.00–21.03 (incl. N. at 01.03, 03.03, 05.00, 10.00(W), 13.00, 17.00(Mon-Fri), 19.00). **German:** Tues 03.45–04.00, Sat 10.40–11.00.

R. DUSHANBE – L.P: Pres: V. Sharipov – **Home Sce. in Tadjik, Russian:** On 254/4640kc: 00.25–09.00, 11.00–21.03. **Own Prgr's:** 00.25–01.00, 01.30–04.00, 06.30–09.00, 11.00–17.00. **Rel. R. Moscow:** 01.00–01.30, 04.00–06.30, 15.00–15.25, 17.00–21.03 (incl. N. 01.00, 02.03, 03.03, 05.00, 15.00, 19.00).

R. KIEV – ADDR: Ukrainske Radio, R. Centre, ul. Khreshchatik 24, Kiev, Ukrainian SSR.– **L.P:** Pres: N. Skatjko – **Home Sce. in Ukrainian, Russian.**
1st Prgr. on 209/6020kc: 01.55–12.30(Sun 23.00), 13.00–22.00.
Own prgr's in Ukranian: 03.45–04.00*, 05.30–06.00, 06.30–09.00*, 09.15–12.30, 13.00–15.00, 15.20–16.00, 17.05–18.00, 20.00–20.30.
N: 05.30, 07.30, 08.30, 10.00 (dictation on 209kc only), 13.00**, 18.00. **Wrp:** 03.55, 07.50, 13.10**, 18.10. **N. in Russian:** 08.00, 09.45. **Rel. R. Moscow:** 02.00–03.45, 15.00–15.30, 16.00–17.00, 18.20–20.00, 20.30–23.00 (incl. N. 02.03, 03.03, 05.03, 06.00, 10.00 (Sun, 15.00, 16.00, 19.00, 21.03, 22.00, 22.55) – * also on 647, 710, 764, 890kc ** also on 400kc – **ANN** (Home & Foreign Sce): "Hovoryt Kijiv" – **V** .by QSL-card.

R. KISHINEV – L.P: Pres: I. Dobanda. – **Home Sce. in Moldavian, Russian:** 03.00–21.03 on 998kc. **Own Prgr's:** 03.15–04.00, 04.30–06.00, 07.30–11.00, 12.44–14.00, 17.00–19.00.
R. Moscow: 04.00–04.30, 14.00–17.00 (incl. N. at 03.03. 04.00. (Press), 10.00(W), 15.00, 19.00) – **ANN:** "Vorbeste Chisinau" (Moldavian) – "Govorit Kishinev" (Russian).

R. LENINGRAD: 1st Prgr: On 800kc: 02.57–12.00, 13.00–17.10. **Own Prgr's:** 03.30–03.45, 14.00–15.00. **N:** 03.30, 14.30 – **Wrp:** 02.57, 03.45, 14.45 – Other times rel. R. Moscow. **2nd Prgr:** On 1124kc: Rel. R. Moscow exc. 14.30–15.00 when own prgr – **Special Prgr.** (for seamen in Baltic Sea and No. Atlantic): Fri/Sat 23.00–00.55 on 800/1124kc.

R. MINSK (in Bielorussian): HOME SCE: 1st Prgr: On 281kc: 02.00–12.00, 13.00–23.00. **Own Prgr's:** 03.30–04.00, 04.15–06.00, 06.00–08.00, 08.30–09.00, 10.00–12.00 (W), 13.00–15.00, 15.30–18.00, 18.00–19.00 (W), 19.30–20.00. **N:** 03.35, 05.00, 06.00, 10.00* (W), 13.00, 17.30 – **Rel. R. Moscow:** 02.00–03.30, 04.00–04.15, 08.00–08.30, 09.00–10.00, 20.00–23.00 (incl. N. at 02.03, 03.03, 08.00, 10.00 (Sun), 15.00, 19.00, 21.03, 22.00, 22.55) – **2nd Prgr:** On 400kc: 02.00–12.00, 12.30–22.00 (rel. R. Moscow exc. 09.00–10.00, 20.00–21.00 when own prgr's). *=281kc only – **ANN:** (Bielorussian) "Havoryts Minsk"

R. RIGA – ADDR: Latvijas Radioraidijumu un televizijas Komiteja, P.O. Box 266, Riga. **Cable:** "Latradio". **Home Sce. in Latvian, Russian:** **1st Prgr:** On 575kc: 02.00–20.20, at 03.00–10.00 also 1349/4121/1484kc **N: Latvian:** 03.15, 05.00, 08.00, 03.00, 12.00, 14.00, 18.00. **Rel. R. Moscow:** 02.00–03.15, 06.15–09.20, 19.00–19.30 (incl. N. at 02.03, 03.03, 15.00, 19.00. **Russian:** 04.30–04.55, 19.30–20.00.

2nd Prgr: On 1349/1421kc 10.00–21.03. **Latvian:** 15.00–15.40, 19.30–20.00. **Russian:** 15.40–16.00. **Rel. R. Moscow:** 10.00–15.00, 16.00–19.30, 20.00–21.03. **Common Prgr.** on 575, 1349, 1421kc: 21.05–21.30 (Concert) – **ANN:** Latvian "Runa Riga" – **PUB:** "Rigas Vilni" (weekly).

R. TALLINN: ADDR: Eesti Raadio ja Televisioon, Postkast 402, Tallinn. **Cable:** "Estradio" – **HOME SCE. in Estonian, Russian: 1st Prgr. in Estonian:** 02.55(Sun 03.55)–21.05 on 1034/6085kc/67.3/69.7/71.1Mc; 02.55–14.00, 15.00–21.05 also on 1332/1403kc. **N:** 03.05 (W), 04.30(W), 05.00(exc. Mon), 08.00(W), 10.00(W), 12.00(W), 13.00 (W), 15.00, 16.30(W), 18.00, 20.00 – **Rel. R. Moscow:** 04.00, 09.00(N), 11.00–12.00(W).
Estonian on 1034kc only: 14.00–15.00(W), Sun 08.30–10.00.
2nd Prgr. in Estonian: on FM 70.8/71.9/68.1Mc: 12.00–16.00(Sun) 14.00–15.00(W), 16.00–23.00(W).
3rd Prgr. in Russian: Rel. R. Moscow : 03.00–14.30 on 710kc, 16.00–23.00 on 1214kc (incl. N. at 03.03, 05.00, 10.00(W), 13.00, 17.00(Mon–Fri), 19.00, 21.03, 22.00(W), 22.55) – **Own Prgr's in Russian:** on 710/1332/1403kc: 05.45–06.00, 06.15–06.45(Fri), 14.00–15.00(N. 14.00), Sun 08.30–10.00.
ANN: "Siin Tallinn" (Estonian) – **PUB:** "Raadioleht" (weekly).

R. TASHKENT: ADDR: Uzbek Radio, ul. Khorezmskaya 49, Tashkent – **L.P:** Pres: U. Y. Ibragimov.
HOME SCE. in Uzbek, Tadjik, Russian, Uighur, Kazakh, Tatar:
1st Prgr: 00.00–09.00, 10.00–18.00 (18.00–20.00 rel. Moscow) on 164/5925kc – **N: Uzbek:** 00.03, 02.00, 07.50, 13.00, 17.00 – **Kazakh** 15.50. **Tadjik** 03.50, 13.50. **Tatar:** Thurs 03.55, Sun 04.55. **Uighur:** 14.30 – **Prgr. in Uighur:** 14.30–15.00, 15.30–16.00 – **Folk music:** Karakalpak (Tues), Kazakh (Wed), Tatar (Mon, Thurs) all at 13.20–13.50 – **N** from Moscow: 01.00, 03.02, 04.00, 05.00, 06.00, 09.00, 15.00, 18.00(W).
2nd Prgr. on 400kc: 03.15–03.30, 13.00–16.00 – **ANN:** Uzbek: "Tashkentdan gaspiramis" – **INT-SIG:** see Foreign Sce.

R. TBILISI – L.P: Pres: P.Yu Shamotava. **Home Sce. in Georgian, Russian, Adshar, Osset:** On 191, 5040kc at 01.45–10.00, 13.00–21.03. **Own Prgr's:** 01.45–03.00, 04.15–06.00, 07.00–10.00, 13.00–15.00, 16.00–20.00. Other times rel. R. Moscow.

R. VILNIUS: Home Sce. in Lithuanian, Russian: 1st Prgr: On 665kc: 02.00–22.00. **Lithuanian:** 04.00–04.25, 05.10–06.00, 14.00–15.00, 15.25–17.00, 18.00–19.00, 19.30–20.55. **N:** 04.00, 05.15, 14.00, 16.00, 18.00, 20.50 – **Russian:** 04.25–05.00 (Mon), 07.45–08.00 (W). **N:** 04.30, 07.45 – Other times rel. R. Moscow.
2nd Prgr. in Lithuanian, Polish, Russian: On 1106kc: 03.00–23.00 – **N. in Lithuanian:** 05.15, 14.00, 16.00, 18.00 – **Polish:** 14.30–15.00. **N:** 14.30 – **Russian:** 15.20–16.00 – Other times rel. R. Moscow.
Special Prgr's in Lithuanian, Russian (bilingual) for seamen in Baltic Sea, Atlantic: Sun 23.00–00.00 on 1106/655kc; Mon 20.00–21.00 on 665kc; Tues: 00.05–01.05 on 1385kc – **ANN:** Lithuanian: "Kalba Vinius". Polish: "Tu Vilnius".

R. YEREVAN – ADDR: Armenian Radio, First Aygestan St. 34, Yerevan 25 – **L.P:** Dir. Gen: H. Ayvazian. Dir. Tec: A. Blkyan. **HOME SCE: in Armenian & Russian:** 01.55–10.00, 12.50–21.03 on 362kc, until 13.30 also on 863/7270kc. **Own Prgr's:** 01.55–03.00, 03.15–05.40, 07.05–10.00, 12.50–15.00, 15.25–19.00. **N. from R. Moscow:** 03.00, 04.00 (Press), 05.00, 15.00, 19.00 – **ANN:** "Khosum e Yerevan" – **INT-SIG:** Ringing melody from an Armenian folklore song "Garouna" (Spring) by Komitas – **V.** by QSL-card.

BROADCASTS FROM THE SOVIET COMMITTEE FOR CULTURAL RELATIONS with Fellowcountry men abroad.
ADDR: Sovietskiy komitet po kulturnym svayzyam s sootechestvennikami za rubejom, Bolshoj Kharitonyevskij pereulok 10, Moscow K-62. **Te:** K 4-60-16 – **L.P:** Pres. of the Comm: V. M. Malyayev.
German branch: Vertretung des sowjetischen Komitees für kulturelle Beziehungen mit Landsleuten im Ausland, Behrenstr. 64/65, 108 Berlin 8, Postal addr: Berlin NW 63, Postfach 6, **Te:** 221480 – **L.P:** Pres: V. Kirillov.
D.Prgr: "Radiostantsiya Rodina":
To We Europe: 06.00–07.00 on 1385kc and in 16, 19, 25, 31, 41mb, 14.00–15.00 in 19, 25, 31, 41mb, 18.00–19.00 in 25, 31, 41mb, 20.00–21.00 on 1493kc and in 31, 41, 49mb.
To America: 23.30–00.30 on 1169/1493kc and in 31, 41, 49mb, 02.00–03.00 in 31, 41, 49mb.
Russian: 06.00–06.30, 14.00–15.00, 18.00–18.30, 20.00–21.00, 23.30–24.00, 02.00–03.00. (Prgr's prepared by different towns: Leningrad, Rostov, Gorkiy, Krasnodar, Barnaul, Volgograd, Stavropol, Voronesh, Irkutsk, etc.) Own prgr's: 14.00–15.00, 20.00–21.00, 02.00–03.00.
National Languages (Ukrainian, Byelorussian, Georgian, Armenian, Azerbaijan, Lithuanian, Latvian, Estonian and 15 further languages): 06.30–07.00, 18.30–19.00, 00.00–00.30 – **V.** by letter. Re. to R. Stn. Rodina, Moscow R. Moscow – **ANN:** "Govorit Radiostantsiya Rodina" – **PUB:** Prgr. schedule is reprinted in the journal "Golos Rodiny" (=Voice of the Homeland).

FOREIGN SERVICES

RADIO MOSCOW TO EUROPE

Albanian m.b.
15.00–15.30 41*, 31, 25, 19**
17.00–17.30 337, 49, 31*, 25**
18.30–19.00 } 337, 49, 31
19.30–20.00 }
20.00–21.00 }
21.30–22.00 337, 321, 49, 41

Bulgarian
06.45–07.00 41, 31, 25
17.30–18.00 337, 49, 41

Danish
17.00–17.30 217, 49, 41
18.30–19.00 49, 41

Dutch
17.30–18.00 227, 49, 41
19.30–20.00 217, 49, 41

English
07.00–07.30 49, 41, 31
12.00–12.30 25, 19
19.00–19.30 227, 49, 41
20.00–20.30 217, 201, 49, 41
21.00–22.00 201, 49, 41
22.00–22.30 227, 217, 201, 49, 41

Finnish
16.30–17.30 201, 49
18.30–19.30 201, 49

French
17.30–18.00 }
18.00–18.30 } 257, 49, 41, 31
19.00–19.30 }
20.00–20.30 217, 49, 41
20.30–21.00 217, 49, 41, 31
21.00–21.30 257, 227, 49, 41, 31

German
06.30–06.45 49, 41, 31
11.00–11.30 31*, 25, 19
12.45–13.15 31*, 25, 19*
16.00–17.00 227, 217, 49, 31**
18.00–19.00 227, 217, 49
20.00–21.00 227, 49
21.30–22.00 227, 217, 49

German for Austria
17.00–17.30 227, 49, 41, 31**
19.30–20.00 227, 49, 41

Greek (¹=to Cyprus)
15.30–16.00 194, 49, 41, 31, 25**
16.30–17.00 337, 49, 41, 31*
18.00–18.30[1] 347, 309, 49, 41, 31**
19.00–19.30 337, 49, 41
20.00–20.30 337, 49, 41
21.00–21.30 321, 49, 41

Hungarian
17.00–17.30 257, 194, 49, 41, 31**
18.30–19.00 257, 194, 49, 41

Italian
13.30–14.00 31*, 25, 19
17.30–18.30 194, 49, 41
19.30–20.30 257, 49, 41
21.00–21.30 194, 49, 41, 31

Macedonian
19.00–19.30 194, 49, 41

Norwegian
12.30–13.00 (Mon–Fri) 457
17.30–18.00 201, 49, 41
19.30–20.00 201, 49, 41

Polish
17.30–18.00 217, 49, 41
19.00–19.30 217, 49
21.00–21.30 337, 217, 49

Portuguese
18.30–19.00 49, 41, 31
19.30–20.00 41, 31

Rumanian
07.00–07.30 49, 41, 31
16.00–16.30 194, 49, 41
18.00–18.30 337, 49, 41

Serbo-Croat m.b.
15.30–16.00 257, 49, 41
16.00–16.15 257, 49, 41, 31**
16.30–17.00 257, 194, 49, 41
19.30–20.00 194, 49, 41
20.30–21.00 194, 49, 41

Slovenian
16.15–16.30 257, 49, 41, 31**
20.00–20.30 194, 49, 41

Spanish
12.30–12.45 31*, 25, 19
18.00–18.30[2] 49, 41, 31
20.00–21.00 41, 31
21.30–22.30 257, 49, 41, 31
[2] Tues, Thurs, Sat in Catalan.

Swedish
18.00–18.30 201, 49
19.00–19.30 201, 49

TO NEAR & MIDDLE EAST

Arabic
12.30–13.30 31, 25, 19
14.00–14.30 31, 25, 19*
16.00–16.30 309, 49, 41, 31
17.30–18.00 347, 309, 49, 41, 31
19.00–20.30 309, 49, 41, 31
20.30–21.00[3] 309, 257, 49, 41, 31
21.00–21.30[4] 309, 41, 31, 25**
[3] to No. We. Africa – [4] to Algeria

Persian
09.30–10.00 25, 19
11.30–12.00 25, 19
15.00–15.30 347, 309, 49, 41, 31, 19**
16.30–17.30 347, 49, 41, 31
18.30–19.00 347, 49, 41, 31

Pushtu (to Afghanistan)
13.30–14.00 375, 31, 25
15.00–15.30 375, 31, 25, 19
16.30–17.00 375, 31, 25

Turkish (⁵=to Cyprus)
10.30–11.00 25, 19
13.30–14.00 31, 25, 19
14.30–15.00 41, 31, 25, 19**
15.30–16.00[5] 309, 49, 41, 31**, 25
16.30–17.30 309, 41, 31, 25**
18.30–19.00 309, 41, 31

TO AFRICA

Bambara m.b
19.00–19.30[6] 41, 31, 25**
[6] Tues, Thurs, Sat.

English
11.30–12.00 25, 19, 16
15.30–16.00 31*, 25*, 19, 16
17.30–18.00[7] 41*, 31, 25, 19
18.30–19.00 41*, 31, 25
19.30–20.00 41*, 31, 25**
20.30–21.00 41, 31, 25**
21.00–21.30 49, 41, 31, 25**
[7] exc. Thurs.

French
16.00–16.30 41, 31*, 25, 19, 16
17.00–17.30 41, 31, 19
18.00–18.30 49*, 41, 31, 25**
19.00–19.30[8] 41, 31, 25**
19.30–20.00 41, 31, 25**
20.30–21.00 41, 31, 25**
21.30–22.00[9] 49, 41, 31, 25**
22.00–22.30 49, 41*, 31, 25**
[8] Tues, Thurs, Sat. [9] to Algeria.

Amharic
17.00–17.30 41*, 31, 25, 19**
18.00–18.30 41, 31, 25
19.00–19.30 41, 31, 25

Hausa
17.30–18.00 49*, 41, 31, 25**
18.30–19.00 49*, 41, 31, 25**
20.00–20.30 41, 31, 25**

Italian
15.00–15.30 31, 25, 19

Lingala
21.00–21.30[10] 41*, 31, 25**, 19
[10] Tues, Fri, Sun only.

Malagasy m.b.
14.00–14.30 31, 19

Portuguese
16.30–17.00 41, 31*, 25, 19, 16
18.00–18.30[11] 41*, 31, 25**, 19
19.00–19.30 41*, 31, 25**
20.00–20.30 41, 31, 25**
[11] exc. Tues, Fri, Sun.

Somali
14.30–15.00 31, 25, 19
16.00–16.30 41*, 31, 25, 19

Swahili
10.00–10.30 25, 19
11.00–11.30 25, 19
12.00–12.30 25, 19
15.30–16.00 41, 31, 25, 19
16.30–17.00 41*, 31, 25*, 19
17.30–18.00 41, 31, 19**
18.30–19.00 41, 31
19.30–20.00 41, 31

Zulu [12] Thurs only.
20.30–21.00[12] 41*, 31, 25, 19

SO. & SO. EA. ASIA

Bengali
10.00–10.30 19, 16
11.00–11.30 19, 16
12.00–12.30 31*, 19, 16
14.00–14.30 31, 19
15.00–15.30 31, 25

Burmese
09.45–10.00 19, 16, 13
12.15–13.00 25, 19, 16

Cambodian
10.30–11.00 19, 16

English
10.00–10.30 25, 19, 16
13.00–13.30 31, 25, 19, 16**
14.30–15.00 31, 25, 19, 16**

French
09.30–10.00 25, 19, 16

Hindi
10.30–11.00 25, 19, 16
11.30–12.00 25, 19, 16
12.30–13.00 25, 19, 16
14.00–14.30 31, 25, 19
15.30–16.00 31, 25

Indonesian
09.00–09.45 19, 16, 13
10.30–11.00 19, 16
11.30–12.15 25, 19, 16
13.30–14.30 31, 25, 19*, 16**
15.00–15.30 31, 25, 19, 16**

Lao
12.30–13.00 31*, 19, 16

Malayalam
11.00–11.30 19
14.00–14.30 31, 25, 19

Nepali
13.30–14.00 31, 25**, 19, 16**

Sinhalese (for Ceylon)
14.30–15.00 31, 25, 19
15.30–16.00 31, 25, 19

Tamil
12.30–13.00 25, 19
13.30–14.00 25, 19

Thai
11.30–12.00 31*, 19, 16
13.00–13.30 31, 19, 16**

Urdu
11.00–11.30 25, 19, 16
12.00–12.30[13] 25, 19, 16
13.00–13.30 25, 19, 16
14.30–15.00 31, 25
16.00–16.30 31, 25, 19
[13] Sat/Sun only.

Vietnamese
22.30–23.00 49, 31, 25
10.30–11.00 41, 31, 25
11.00–11.30 25, 19, 16
12.00–12.30 41, 31, 25
13.00–13.30 25, 19
14.30–15.00 31, 25, 19

TO FAR EAST

English m.b.
21.30–22.00 548, 447, 240, 49, 41, 31
11.30–12.00 261, 49*, 41, 31**, 25**
12.30–13.00 261, 49, 41
13.30–14.00 261, 49, 41

Chinese
23.00–24.00 240, 49, 31, 25
05.15–06.45 25, 19, 16
08.30–09.00 548, 447, 240, 31, 25, 19, 16
09.30–10.30 447, 240, 41, 31, 25
10.30–11.00 548, 240, 49, 31**, 25**
11.00–12.00 548, 240, 49, 41, 31, 25, 16
12.00–12.30 548, 447, 240, 49, 25**
12.30–13.30 548, 447, 240, 49, 41, 31, 25
13.30–14.00 240, 41, 31, 25
14.00–14.30 548, 447, 240, 49, 41, 31, 25
14.30–15.30 548, 447, 240, 49, 41, 31, 25, 19**
15.30–16.00 548, 447, 240, 49, 41, 31, 25**

Korean
21.00–21.30 548, 447, 240, 49, 41, 31, 25
22.00–22.30 548, 447, 240, 49, 31, 25
09.00–10.00 548, 49, 25, 19**, 16
10.00–10.30 548, 49*, 31, 25, 19**, 16
11.00–11.30 261, 49, 41, 31**, 25**
11.30–12.00 548, 447, 49, 41, 31*, 25**
13.30–14.00 548, 447, 49, 41*, 31, 25, 19**

Mongolian
09.30–10.00 31, 25, 16**
11.30–12.00 41*, 31, 25, 16**
13.15–14.00 49*, 41*, 31, 25**

Japanese
08.00–08.30 447, 261, 240, 49, 41, 31, 25**
08.30–09.15 261, 49, 41, 31, 25**
09.15–10.30 261, 49*, 41, 31, 25**
10.30–11.00 261, 41, 31, 25, 19**
12.00–12.30 261, 41, 31, 25**
13.00–13.30 261, 49, 41, 31, 25
14.00–14.30 261, 49, 41, 31, 25, 19**

TO USA in English

First Prgr.
22.00–22.30 41, 31
23.00–23.30 41, 31
00.00–00.30 41, 31
01.00–01.30 41, 31
02.00–02.30 49, 41, 31
02.30–03.00 41, 31
03.00–03.30 49, 41
04.00–04.30 41
05.00–06.00 41, 31

Second Prgr.
17.30–19.30 (Sun) 49, 41, 31
03.00–04.00 31, 19
04.00–07.30 41, 31

TO WEST INDIES

French (to Martinique)
00.00–00.30 49, 41, 31
Thurs, Sun only.

TO LATIN AMERICA

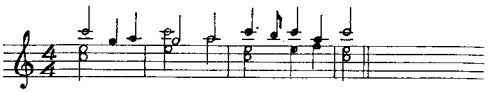
Portuguese to Brazil
21.30–23.00 41, 31
00.00–01.00 41, 31

Spanish to Cuba
23.30–24.00 41, 31
00.30–01.00 49, 41, 31
01.00–02.00 49, 41, 31
02.00–02.30 41, 31
02.30–03.00 49, 41, 31
03.00–03.30 41, 31

Spanish to So. America
First Prgr. m.b.
23.00–24.00 41, 31
01.00–01.30 41, 31
02.00–03.00 41, 31
Second Prgr.
00.30–02.30 25, 19, 16
02.30–03.00 25, 19
Spanish to C. America
01.30–02.00 41, 31
03.30–04.00 49, 41, 31
04.00–05.00 49, 41, 31

* to March 1st 1965. ** from March 1st 1965.

R. BAKU: Azerbaijan: 04.00–04.30 in 60.31m.b, 13.30–14.00 in 60, 49, 31m.b – **Arabic:** 15.30–16.00, 16.30–17.00 in 49, 31m.b – **Persian:** 04.30–04.45 in 60, 31m.b, 13.00–13.30 in 60, 49, 31m.b, 14.00–15.00 in 49, 31m.b – **Turkish:** 15.00–15.30, 16.00–16.30 in 49, 31m.b, 17.30–18.20 in 49m.b.
ANN: Azerbaijan: "Danishir Baku". Arabic: "Huna Baku". Persian: "Inja Baku". Turkish: "Burasi Baku" – **INT-SIG:**



R. DUSHANBE: Persian: 15.30–16.00 & 18.00–18.30 on 375m – **Tadjik:** 14.00–15.00 on 375 and 41m, 16.00–16.30 & 17.00–17.30 on 375m. (41m.b. is reported as 7330kc).

R. EREVAN: Armenian: 08.00–09.00(Sun) in 41, 31m.b, 15.30–16.25, 19.30–21.05 on 348, 41, m.b. 2nd Prgr: 19.30–20.30(Sat/Sun) in 49, 41, 31m.b – **Arabic:** 14.20–15.00, 19.00–19.30 on 348, 41m.b.

R. KIEV: Ukranian: To Europe: 16.00–17.00 in 49, 41, 31m.b, 18.30–19.30 in 49, 41 m.b. To No. America: 22.30–23.00, 23.30–24.00, 00.30–01.00, 03.30–04.00, 04.30–05.00 in 41, 31m.b – **ANN:** "Hovoryt Kiev". E: "This is R. Kiev".

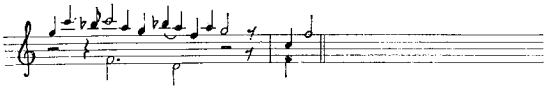
R. MINSK: Bielorussian: 21.30–22.30 in 49m.b – **ANN:** "Havoryts Minsk".

R. RIGA: Latvian: 08.30–09.15(Sun) on 521, 222m, 21.15–22.00(Tues) on 521, 222, 211m – **Swedish:** 08.00–08.30(Sun) on 521, 20.20–20.50 (Tues, Thurs, Sat) on 521m, 21.30–22.00(Wed, Fri, Sun) on 521, 222, 211m.

R. TALLIN - ADDR: Eesti Radio, P.O. Box 402, Tallinn, Estonian SSR.
Cable: "Estradio" – **Estonian:** 21.05–21.40(Tues, Thurs, Sat) on 290, 49m.b – **Finnish:** 08.00–09.15(Sun) on 290, 49m.b, 09.15–09.30 & 16.00–16.30(W) on 290m – **Swedish:** 21.05–21.40(Mon, Wed, Fri, Sun) on 290, 49m.b – **ANN:** Finnish: "Täällä Tallinna". Swedish: Här är Tallinn" – V. by QSL-card and letter.

R. VILNIUS - ADDR: Lieturas TSR Radijas, ul. Kanarskio 49, Vilnius – **Lithaunian:** 22.30–23.30 in 49, 41m.b – V. by QSL-card.

R. TASHKENT in 31, 25m.b. (9600, 11925kc): English: 12.00–12.30, 14.00–14.30 – **Hindi:** 13.00–13.30, 15.00–15.30 – **Persian:** 16.00–16.30, 17.30–18.00(also on 375m) – **Urdu:** 12.30–13.00, 13.30–14.00 – **Uzbekh:** 16.30–17.00 – **ANN:** "This is Tashkent Calling" – **INT-SIG:** played on Chang (Uzbek nat. instrument), Violin and Cello.



V. by QSL-card – **Pub:** Prgr. schedule free.

VATICAN STATE

L.T: GMT+1 h.

VATICAN RADIO (Rel.)
ADDR: Vatican Radio, Vatican City. **Cable:** Vatican Radio. **Te:** 698. **L.P:** Dir. Gen: Rev. Prof. Antonio Stefanizzi S. J. Dir. Prgr: Rev. F. Ramirez S. J. Dir. Tec: Dott. Ing. Tullio Gorio.
STATIONS: Medium Waves:
HV2 782kc 383.6m 2kW – HV100 1529kc 196.2m 100kW.
FM: 93.3, 96.3Mc 0.5kW.
Short Waves: 25/50/100kW.

kc	m	kc	m	kc	m	kc	m
5985	50.12	9630	31.15	11770	25.49	15155	19.79
6190	48.47	9645	31.10	11875	25.27	17840	16.82
7250	41.38	9690	30.96	15115	19.85	21485	13.96
7295	41.12	11740	25.55	15120	19.84		

PROGRAM SCHEDULE: (October 64–April 65)
The wavelengths are subject to change with seasonal variations, or to avoid interference.

TO EUROPE		kc
Albanian:	20.30 Tues, Thurs, Sat	6190, 7250, 1529
Bulgarian:	17.30 Tues, Thurs	6190, 7250, 9645, 1529
	11.10 Sun	7250, 9645, 11740, 1529
Croat:	17.45 Sun, Mon, Tues, Wed, Fri	6190, 7250, 1529
Czech:	12.30 D	7250, 9645, 11740, 1529
	19.30 D	6190, 7250, 9645, 1529
English:	15.00 D	7250, 9645, 11740, 1529
	18.15 D	6190, 7250, 9645, 1529
Estonian:	15.45 Sun	7250, 9645, 11740
French:	11.45 D	7250, 9645, 11740, 1529
	14.30 D	7250, 9645, 11740, 1529
	19.15 D	6190, 7250, 9645, 1529
German:	12.45 D	7250, 9645, 11740, 1529
	14.45 D	7250, 9645, 11740, 1529
	19.45 D	6190, 7250, 9645, 1529
Hungarian:	13.00 D	7250, 9645, 11740, 1529
	21.00 D	6190, 7250, 9645, 1529
Italian:	13.30 D	6190, 7250, 9645, 11740, 1529
	16.00 Fri	6190, 7250, 9645, 1529
	18.30 D	6190, 7250, 9645, 1529
	21.30 D	1529
Latin:	11.30 Tues, Thurs, Sat	7250, 9645, 11740, 15120, 1529
	16.30 Tues, Thurs, Sat	7250, 9645, 11740, 15120, 1529
	21.15 Tues, Thurs, Sat	6190, 7250, 9645, 1529
	20.00 D(H. Rosary)	6190, 7250, 9645, 11740, 1529
Latvian:	17.30 Mon, Fri	6190, 7250, 9645, 1529
Lithuanian:	07.30 Sun	9645, 11740
	17.15 D	6190, 7250, 9645, 1529
Polish:	12.15 D	7250, 9645, 11740, 1529
	15.15 D	7250, 9645, 11740, 1529
	19.00 D	6190, 7250, 9645, 1529
Portuguese:	15.30 D	7250, 9645, 11740, 1529
	20.30 D	7295, 9690
Rumanian:	17.30 Sun, Wed, Sat	6190, 7250, 9645, 1529
Russian:	14.00 D	9645, 11740, 15120, 1529
	18.00 D	6190, 7250, 9645, 1529
Slovak:	12.00 D	7250, 9645, 11740, 1529
	20.15 D	6190, 7250, 9645, 1529
Slovene:	17.45 Thurs, Sat	6190, 7250, 1529
	20.30 Mon, Fri	6190, 7250, 1529
	10.50 Sun	7250, 9645, 1529
Spanish:	14.15 D	7250, 9645, 11740, 1529
	20.45 D	6190, 7250, 9645, 1529
Swedish, Danish, Norwegian:		
	20.30 Wed, Sun	7250, 9645, 1529
Ukrainian:	17.00 Sun, Tues, Thurs, Fri	6190, 7250, 9645, 1529
White Ruth:	17.00 Mon, Wed, Sat	6190, 7250, 9645, 1529
Concert:	19.30 Sun	6190, 7250, 9645, 11740, 1529
	12.30 Mon	7250, 9645, 11740, 1529
	16.00 Thurs	6190, 7250, 9645, 1529
Liturgy:		
Latin:	08.30 Sun	7250, 9645, 11740, 15120
Oriental:	09.30 Sun	7250, 9645, 11740, 15120, 1529

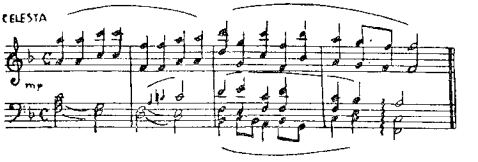
TO AFRICA		
Arabic:	16.45 D	7250, 9645, 11740, 1529
English:	10.00 W	17840, 21485
	10.20 W	17840, 21485
Ethiopian:	16.30 Mon, Wed, Fri	11875, 15120, 1529
French:	10.50 W	17840, 21485
	11.10 W	17840, 21485
Portuguese:	10.35 W	17840, 21485
Swahili:	16.15 D	11875, 15120

TO AMERICA		
Portuguese:	23.00 D	9645, 11740
Spanish:	23.30 D	9645, 11740
	00.00 D	5985, 7250, 9645
	00.30 D	5985, 7250, 9645
English:	00.50 D(for USA)	5985, 7250, 9645
French:	01.10 D	5985, 7250, 9645

TO ASIA * for India, ** for Philippines		
Arabic:	16.45 D	7250, 9645, 11740, 1529
Chinese:	22.30 Tues, Thurs, Sat	7250, 9630, 11740
English:	*16.00 Mon, Wed, Sat	9645, 11740, 9630
	**22.30 Mon, Wed, Sat	7250, 9630, 11740
Japanese:	21.45 Mon, Wed, Fri	7250, 9630, 11740

TO AUSTRALIA/NEW ZEALAND		kc
English:	11.30 D	11770, 15115
	22.00 D	7250, 9630

OPENING SIG: The bells of St. Peter's.
ANN: "Laudetur Jesus Christus. Praised be Jesus Christ. This is Vatican Radio".
INT-SIG: Carillon Melody "Christus Vincit" executed on the celeste with orchestral accompaniment.



V. by QSL-card or letter. Records accepted. **PUB:** Prgr. sched. free on request.
Brown, Boveri, Switzerland: 2×10kW sw-tr's one 135kW mw-tr. Telefunken A.G. Germany: 2×100kW sw-tr's studio equip (recorders).

YUGOSLAVIA

L.T: GMT+1 h – Pr.L: Serbo-Croat, Slovenian, Macedonian.

JUGOSLOVENSKA RADIOTELEVIZIJA (Go.)

FI: By license payments – **AD:** Beograd 60 min, Zagreb 85 min, Ljubljana 65 min, Sarajevo 65 min, Skopje 135 min, Titograd 30 min, Novi Sad 70 min, Pristina 30 min per day.
ADDR: 70 Borisa Kidrica, Belgrade. **Cable:** Jugoslovenska radiotelevizija Beograd. **Te:** 43-677. **Telex:** 01-259 jurate beograd.
L.P: Radiotelevision Yugoslave: Pres. Adm. Committee: Z. Vukovic. Secr. Gen: Dr. I. Pustisek. Chief of Foreign Relations: Mr. O. Vojvodic. Commission Political Broadc: Pres: M. Markovic. Secr: Dr. I. Pustisek. Commission Cultural Broadc: Pres: Mrs. N. Erceg. Secr: Mrs. O. Vojvodic. Commission TV Prgr: Pres: D. Fortic. Secr: M. Milosavljevic. Commission Musical Prgr's: Pres: D. Savic. Secr: Mrs. L. Frajt. Tech. Commission: Pres: Eng. S. Rojec. Secr: Eng. M. Argirovic. Jur. Commission: Pres: L. Dimitrovski. Secr: P. Tipsarevic. **Radiotelevision Belgrade:** Dir. Gen: Z. Vukovic. Dir. Tec: Eng. R. Zizic. **Radiotelevision Zagreb:** Dir. Gen: I. Bojanic. Dir. Tec: V. Trs. **Radiotelevision Ljubljana:** Dir. Gen: B. Mikos. Dir. Tec: Eng. S. Pernuš. **Radiotelevision Skopje:** Dir. Gen: D. Tozija. Dir. Tec: Eng. B. Oncevski. **R. Sarajevo:** Dir. Gen: V. Savic. Dir. Tec: Eng. F. Lastavec. **R. Titograd:** Dir: M. Brailo. Dir. Tec: Eng. L. Kosovic. **R. Novi Sad:** Dir: S. Sabatka. Dir. Tec: Eng. I. Djukic. **R. Pristina:** Dir: R. Dauti. Dir. Tec: Eng. I. Lozovoj.

MEDIUM WAVES:

Main stations	kc	m	kW		kc	m	kW
Beograd I	683	439	150	Ljubljana	917	327.1	135
Sarajevo	613	491	100	Zagreb	1133	264.7	135
Skopje I	809	371	135	Novi Sad	1268	236.6	100
Titograd	881	341	100	Pristina	1412	212.4	100
Local stations	**kc**	**m**	**kW**		**kc**	**m**	**kW**
Sisak	782	384	0.05	Skopje	1484	202.2	0.4
Nis	926	324.0	10	Titov Veles	1484	202.2	0.1
Rijeka I	1133	264.7	20	Gostivar	1484	202.2	0.05
Hvar-Split	1133	264.7	50	Gevgelija	1484	202.2	0.05
Zadar	1133	265	2	Kavadar	1484	202.2	0.05
Koper	1169	256.6	6	Kocani	1484	202.2	0.15
Maribor	1412	212.4	5	Prilep	1484	202.2	0.035
Osijek	1412	212.4	2	Strumica	1484	202.2	0.05
Gospic	1412	212.4	20	Stip	1484	202.2	0.05
Split II	1412	212.4	2	Kicevo	1484	202.2	0.15
Bitola	1484	202.2	2	Tuzla	1484	202.2	2
Celje	1484	202.2	2	Brcko	1484	202.2	0.1
Dubrovnik	1484	202.2	2	Ohrid I	1484	202.2	2
Beograd II	1484	202.2	2	Crnomelj	1484	202.2	0.05
Ljubljana II	1484	202.2	2	Radlje	1484	202.2	0.05
Sljeme	1484	202.2	2	Vukovar	1484	202.2	0.2
Rijeka II	1484	202.2	2	Svetozarevo	1484	202.2	1.5
Novi Sad II	1484	202.2	2	Pula	1484	202.2	1.5
Murska Sobota	1484	202.2	1	Resen	1484	202.2	0.15
Radiovič	1484	202.2	0.05	Ohrid II	1484	202.2	0.02
Ptuj	1484	202.2	0.05	Rijeka II	1484	202.2	2
Slavonski bzod	1484	202.2	0.05	Porec	1484	202.2	0.05
Knin	1484	202.2	0.03	Tolmin	1484	202.2	0.05
Buje	1484	202.2	0.05	Vinkovci	1594	188	0.03
Djakovo	1484	202.2	0.05	Sombor	1594	188	0.03
Petrinja	1484	202.2	0.05	Karlovac	1594	188	0.05
Varazdin	1484	202.2	0.05	Krapina	1594	188	0.05
Slovengradec	1484	202.2	0.05	Rovinj	1594	188	0.05
				Bzeziec	1594	188	0.05

SHORT WAVES: Beograd:

kc	m	kW
6100	49.18	100
6150	48.78	100
7200	41.67	50
7240	41.44	50
9505	31.56	10
9620	31.18	10
11735	25.56	10
15240	19.69	10

FM:	Mc	kW (ERP)
Beograd-Avala	95.3	0.25
Beograd	88.1	0.25
Crni Vrh I	89.7	4
Crni Vrh II	99.3	4
Crveni Cot I	94.5	10
Goles I	99.7	4
Jastrebac I	96.9	50
Novi Sad I	90.5	50
Novi Sad II	87.7	5
Pristina	90.5	1
Crveni Cot II	96.5	6
Goles II	92.5	1
Goles III	95.7	10
Jastrebac II	89.3	50
Ovcar I	88.1	1
Ovcar II	90.1	1
Tupiznica I	92.5	4
Tupiznica II	96.1	4
Dubrovnik	98.5	1.25
Psunj	97.3	1.5
Pula	88.1	7
Sljeme	92.1	50
Stipanov Gric	87.7	2.5
Velebit	93.3	10
Labistica	96.1	50
Peljesac	89.7	5
Srdj	98.5	1.75
Ucka	96.9	50
Zagreb I	97.9	0.09
Zagreb II	88.1	0.06
Koper-Mesto	89.3	1
Koper-B. Kriz	97.7	0.375
Krvavec II	98.9	2.5
Krum I	94.1	4.5
Krum II	99.9	1.5
Ljubljana I	96.5	1.5
Ljubljana II	93.5	2.5
Mirna Gora I	97.7	1.5
Nanos I	92.9	1.5
Nanos II	95.3	2.5
Plesivec II	90.1	1
Pohorje I	88.5	0.375
Pohorje II	96.9	2.5
Stol I	91.9	0.25
Sarajevo I	95.7	1
Sarajevo II	98.1	1
Velez	91.7	1
Skopje	94.5	1
Mali Vlaj Crni Vrh III	93.3	0.1
Dolno Nerezi	94.1	0.6
Pelister	98.9	1.5
Popova Sapka	97.8	0.6
Titograd	96.5	0.25

HOME SERVICE

R. Beograd: W 03.00–23.05 (Sat through Mon 03.00–23.05). **N, Comm:** 03.00, 04.00, 05.00, 07.00, 09.00, 11.00, 12.00, 14.00, 16.00, 17.00, 18.30, 21.00, 23.00.

R. Zagreb: W 04.00–23.05(Sat 24.00). Sun 05.00–23.05. **N. Comm:** 07.00, 08.30, 10.00, 12.00, 14.00, 16.00, 21.00, 22.00, 23.00.

R. Ljubljana: W 04.00–23.00. Sun 05.00–23.00. **N, Comm:** 04.05, 05.00, 06.05, 07.00, 09.00, 11.00, 12.00, 14.00, 16.00, 17.00, 21.00, 22.00, 23.00.

R. Skopje: D 03.55–23.00. **N, Comm:** 04.15, 05.15, 06.30, 09.00, 10.00, 11.00, 12.00, 13.00, 14.00, 15.00, 16.00, 18.30, 21.00, 22.00, 23.00.

R. Sarajevo: W 04.25–23.00(Sat 24.00). Sun 04.55–23.05. **N:** 04.30, 05.30, 09.00, 11.00, 12.00, 14.00, 15.00, 18.30, 21.00, 22.00, 22.55.

R. Titograd: W 04.30–06.30, 12.00–21.00. Sun 05.00–21.00. **N, Comm:** 04.00, 05.00, 12.00, 13.00, 15.00, 16.00, 18.00, 20.30.

R. Novi Sad: D 04.00–23.00. **N, Comm:** 04.15, 04.45, 05.00, 06.00, 11.00, 12.00, 16.00, 17.00, 18.00, 20.30, 21.30, 23.00.

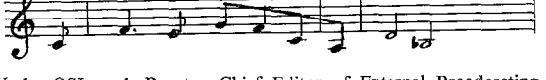
R. Pristina: W 04.30–07.00, 11.00–23.00. Sun 05.00–23.00. **N. Comm:** 05.30, 07.00, 11.00, 15.00, 17.00, 18.00, 18.30, 21.00.

FOREIGN SERVICE

Albanian	kc
14.00–14.30	6100, 7200, 9505
17.00–17.45	1412
18.30–19.00	881, 9505
20.30–20.45	(W) 1412
Arabic	
15.00–15.15	6100, 9505, 11735
17.30–18.00	6100, 7200
19.45–20.00	6100, 7200, 9505
Bulgarian	
14.00–14.30	917
18.00–18.30	6100, 7200, 9505
09.00–10.00	(Sun) 917
Czech	
16.45–17.00	1268
20.00–20.30	6100, 7200, 9505
21.30–21.45	1268
English	
15.30–16.00	9505, 11735, 15240
18.30–19.00	6100, 7200
22.00–22.15	1268, 6100, 7200, 9505
French	**kc**
16.30–16.45	6100, 7200, 9505
19.30–19.45	6100, 7200, 9505
22.15–22.30	1268, 6100, 7200, 9505
German	
16.45–17.00	61.00, 7200, 9505
17.30–18.00	9505
16.45–17.00	6100, 7200, 9505
20.45–21.00	6100, 7200, 9505
Polish	
16.00–16.30	6100, 7200, 9505
20.30–20.45	6100, 7200, 9505
Russian	
04.30–04.15	1268, 6100, 7200, 9505
14.30–14.45	6100, 7200, 9505
17.00–17.30	6100, 7200, 9505
19.00–19.30	6100, 7200, 9505
Spanish	
21.30–22.00	6100, 7200, 9505
00.00–00.30	7200, 9505, 11735
01.00–01.30	7200, 9505, 11735

ANN: Home Service: "Here is Radiotelevision Beograd, ...Zagreb, ...Ljubljana etc." – "Ovde Radiotelevizija Beograd, ...Zagreb, ...Ljubljana etc." – "Ici la Yougoslavie, Belgrade vous parle". "Hier spricht R. Beograd" – Foreign Service: "This is Yugoslavia, R. Belgrade calling"

INT-SIG: Home and Foreign Service: The beginning of the "Internationale" (Radio Belgrade).



V. by QSL-card. Re. to: Chief Editor of External Broadcasting. 2 Hilendarska, Beograd. Records accepted.

Telefunken A.G. Germany delivered studio equip (recorders) – AKG, Austria delivered studio equipment (recorders, microphones).
Brown Boveri, Switzerland, delivered 100kW sw-tr. (Stublisa), 100kW mw-tr. Skopje, 20kW Zagreb.
Sondor, Switzerland, delivered studio equipment to Ljubljana, Beograd. Wilh. Franz KG, Germany: EMT studio equip.

ALGERIA

L.T: GMT – **Pr.L:** French, Arabic, Kabyl.

RADIO ALGERIE (Go.)

ADDR: 21, Blv. des Martyrs, Algiers. **Te:** 661590. **Telex:** 91014.
L.P: Dir. Gen: M. Mahi Youssef Mounir. Dir. Adm: Messaoudi Zitouni. Dir. Tec: A. Laghouati. St. Mgr. (Sound): B. Zerrouki.

ARABIC NETWORK: Mo, Thurs 06.30–09.30, 11.00–00.30, other days 06.30–00.30.

	kc	m	kW		kc	m	kW
Algier I	980	306.1	200	Constantine I	1142	262.7	40
Oran I	1142	262.7	40	Alger	9510	31.55	50
					11810	25.40	50

N: 07.00, 10.00, 12.00, 13.15, 15.00, 17.15, 18.00, 20.00, 22.30, 24.00.

FRENCH NETWORK: W: 06.30–09.00, 11.00–14.30, 17.00–23.00. Sun: 07.00–23.00.

	kc	m	kW		kc	m	kW
Algier II	890	331.1	200	Oran II	1304	230.0	20
Constantine II	1304	230.1	20	Alger	11835	25.35	50

N: 07.30, 12.15, 13.00, 18.00, 19.00, 19.45, 22.45.

KABYL NETWORK: D: 06.30–09.00, 12.00–15.00, 18.00–23.00.

	kc	m	kW		kc	m	kW
Alger III	1421	211	40	Alger	6160	48.70	50

N: 07.15, 12.30, 14.45, 18.02, 19.30, 22.40.

SUPPLEMENTARY NETWORK (relays French, Arabic netw., local prgrs): 11.00–13.15, 17.00–23.00.

	kc	m	kW		kc	m	kW
Bechar	548	547	20	Setif	854	351	0.05
Touggoourt	557	539	1	Batna	1016	295	1
Laghourt	575	522	4	Souk Ahras	1079	278	1
Bouira	692	434	1	Bougie	1594	188.2	0.6
Tlemcen	746	402	1				

RELAYS ON SHORT WAVE:

Arabic (to Morocco, Middle East): Mon, Thurs: 06.30–09.30, 17.00–00.30 on 9510kc; Other days: 06.30–11.00, 17.00–00.30 on 9510kc; D: 11.00–17.00 on 11810kc.

French (to Europe): W: 06.30–09.00, 11.00–14.30, 17.00–23.00. Sun: 07.00–23.00 on 11835kc.

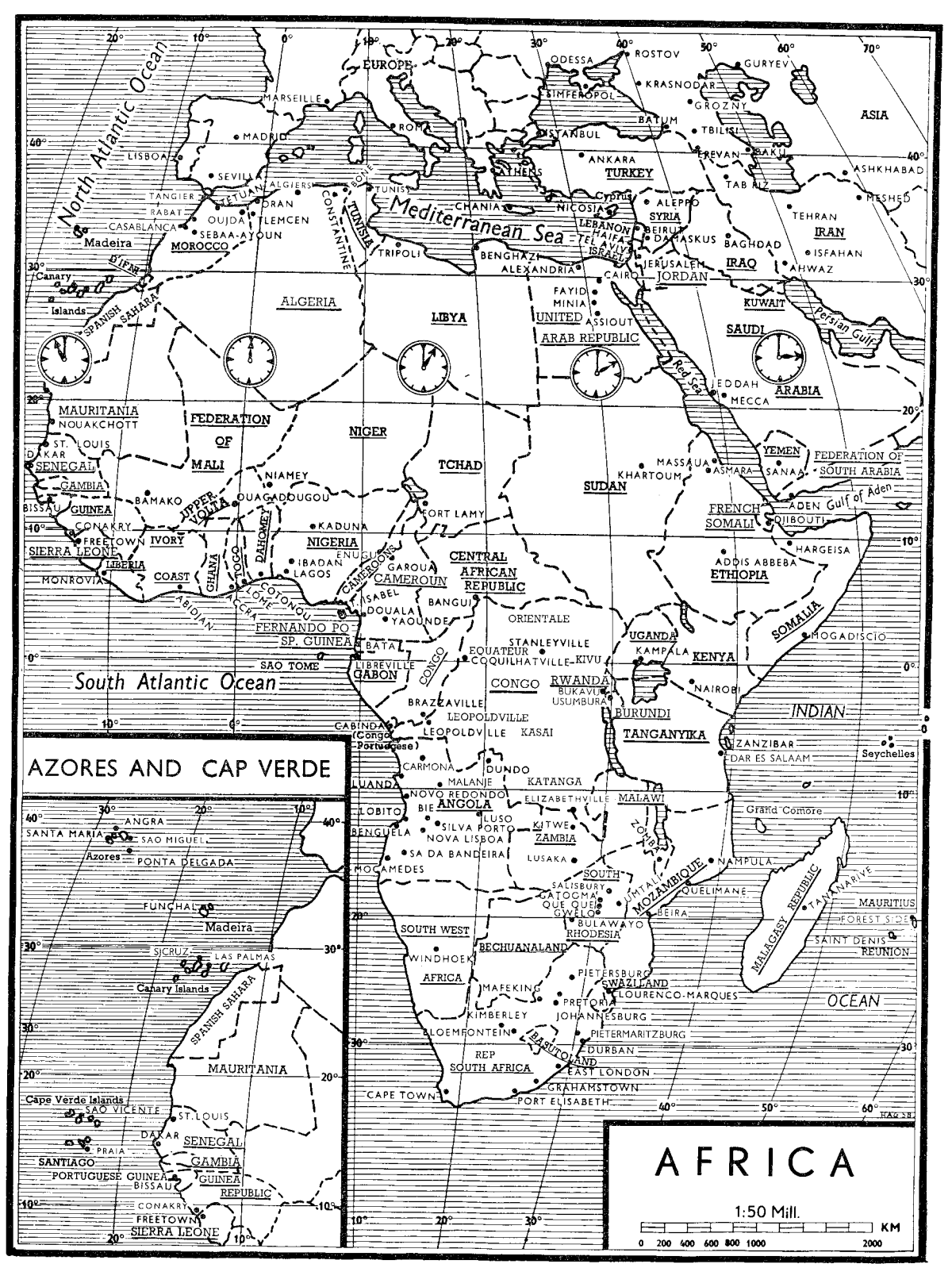
Kabyl (to Europe): D: 06.30–09.00, 12.00–15.00, 18.00–23.00 on 6160kc.

ANN: F: "Ici Alger Radiodiff. Télévision de la Republique Algerienne Democratique et populaire". Arabic: "Houna el Djazair Idhaatou el Djamhouriati el Djazariyati el Demaukrati hati oua ch'chaa bi'yati" – V. by letter. Records accepted.

ANGOLA (Portuguese West Africa)

L.T: GMT+1 h – **Pr.L:** Portuguese – **Fee:** 120$00.
STATIONS: Call CR6 – All st's comm. exc. 9) (Go.), 10) (Rlg. – Catholic).

Short Waves:	kc	m	kW	Name
1) —	3230	93.00	10	R. Comercial de Angola
2) —	3295	91.05	1	R. Cl. de Benguela
3) RD	3704	80.99	1	R. Cl. Do Huambo
4) RM	3740	80.21	0.5	R. Cl. de Mocamedes
5) SG	3970	75.57	1	R. Cl. da Huila
2) —	3975	75.47	1	R. Cl. de Benguela
1) —	3980	75.38	10	R. Comercial de Angola
6) RG	4770	62.89	0.5	R. Diamang
7) RY	4788	62.68	2	R. Cl. do Cuanza Sul
3) RD	4800	62.50	1	R. Cl. do Huambo
1) —	4860	61.73	10	R. Comercial de Angola
8) RN	4869	61.60	1	R. Cl. de Angola
9) RS	4905	61.16	1	R. Cl. do Lobito
10) RZ	4955	60.54	3	R. Angola
11) RE	4965	60.42	1	R. Cl. de Malanje
12) RB	4984	60.19	0.2	R. Ecclesia
13) RO	4986	60.17	1	R. Cl. do Bie


AFRICA
1:50 Mill.
KM
0 200 400 600 800 1000 2000
AZORES AND CAP VERDE
North Atlantic Ocean
South Atlantic Ocean
Mediterranean Sea
INDIAN OCEAN
EUROPE
ASIA
MOROCCO
ALGERIA
TUNISIA
LIBYA
EGYPT
SUDAN
ETHIOPIA
SOMALIA
KENYA
UGANDA
TANGANYIKA
MAURITANIA
SENEGAL
GAMBIA
GUINEA
SIERRA LEONE
LIBERIA
IVORY COAST
GHANA
TOGO
DAHOMEY
NIGER
NIGERIA
CAMEROUN
CHAD
CENTRAL AFRICAN REPUBLIC
CONGO
GABON
ANGOLA
ZAMBIA
RHODESIA
MOZAMBIQUE
MALAWI
SOUTH AFRICA
BECHUANALAND
SWAZILAND
LESOTHO
MALAGASY REPUBLIC
MAURITIUS
REUNION
SAUDI ARABIA
YEMEN
JORDAN
IRAQ
IRAN
TURKEY
SYRIA
LEBANON
ISRAEL
UNITED ARAB REPUBLIC
KUWAIT
Persian Gulf
Red Sea
Gulf of Aden
FRENCH SOMALI
FEDERATION OF SOUTH ARABIA
Canary Islands
Madeira
Azores
Cape Verde Islands
SPANISH SAHARA
FEDERATION OF MALI
UPPER VOLTA
FERNANDO PO
SP. GUINEA
SAO TOME
Seychelles
Grand Comore
FOREST SIDE
SAINT DENIS
MARSEILLE
ROME
ATHENS
ISTANBUL
ANKARA
ODESSA
ROSTOV
KRASNODAR
SIMFEROPOL
GROZNY
BATUM
TBILISI
YEREVAN
BAKU
GURYEV
ASHKHABAD
MESHED
TEHRAN
BAGHDAD
ISFAHAN
AHWAZ
ALEPPO
DAMASCUS
BEIRUT
JERUSALEM
CAIRO
ALEXANDRIA
FAYID
MINIA
ASSIOUT
JEDDAH
MECCA
MASSAUA
ASMARA
SANAA
KHARTOUM
HARGEISA
ADDIS ABBEBA
MOGADISCIO
NAIROBI
ZANZIBAR
DAR ES SALAAM
NAMPULA
QUELIMANE
BEIRA
TANANARIVE
PIETERMARITZBURG
DURBAN
EAST LONDON
GRAHAMSTOWN
PORT ELISABETH
CAPE TOWN
BLOEMFONTEIN
KIMBERLEY
JOHANNESBURG
PRETORIA
LOURENCO-MARQUES
MAFEKING
PIETERSBURG
WINDHOEK
SOUTH WEST AFRICA
BULAWAYO
GWELO
QUE QUE
GATOOMA
SALISBURY
UMTALI
LUSAKA
KITWE
NOVA LISBOA
LUANDA
LOBITO
BENGUELA
MOCAMEDES
SA DA BANDEIRA
LUSO
SILVA PORTO
BIE
CARMONA
DUNDO
MALANJE
NOVO REDONDO
ELIZABETHVILLE
KATANGA
KASAI
LEOPOLDVILLE
BRAZZAVILLE
CABINDA (Congo Portuguese)
BATA
LIBREVILLE
EQUATEUR
COQUILHATVILLE
STANLEYVILLE
KIVU
ORIENTALE
BANGUI
DOUALA
YAOUNDE
ISABEL
ENUGU
GAROUA
IBADAN
LAGOS
KADUNA
FORT LAMY
NIAMEY
OUAGADOUGOU
BAMAKO
CONAKRY
FREETOWN
MONROVIA
ACCRA
LOME
COTONOU
ABIDJAN
NOUAKCHOTT
ST. LOUIS
DAKAR
TUNIS
TRIPOLI
BENGHAZI
CHANIA
NICOSIA
Cyprus
ATHENS
CONSTANTINE
ALGIERS
TETUAN
TANGIER
RABAT
OUJDA
TLEMCEN
DRAN
SEBAA-AYOUN
CASABLANCA
SEVILLA
LISBOA
MADRID
D'IFNI
BONE
HAIFA
TEL AVIV
BUKAVU
USUMBURA
NUPURA
ANGRA
SANTA MARIA
SAO MIGUEL
PONTA DELGADA
FUNCHAL
SICRUZ
LAS PALMAS
SAO VICENTE
ST. LOUIS
DAKAR
PRAIA
SANTIAGO
PORTUGUESE GUINEA
BISSAU
CONAKRY
FREETOWN
SENEGAL
GAMBIA
GUINEA
REPUBLIC
SIERRA LEONE
MAURITANIA
SPANISH SAHARA
Canary Islands
Madeira
Azores
HAG 58

Angola

Short Waves:	kc	m	kW	Name
4) RM	5015	59.82	1	R. Clube de Mocamedes
5) RH	5024	59.71	1	R. Cl. da Huila
14) RW	5033	59.59	1	R. Cl. de Cabinda
2) RF	5042	59.50	1	R. Cl. de Benguela
3) RD	5060	59.29	1	R. Cl. do Huambo
15) RV	5137	58.40	1	R. Cl. do Moxico
10) RZ	6025	49.79	10	R. Angola
2) —	6150	48.78	1	R. Cl. de Benguela
16) RU	6135	48.90	1	R. Cl. de Congo Portuguese
11) RE	7115	42.15	0.5	R. Cl. de Malanje
8) RA	7140	42.02	0.25	R. Cl. de Angola
1) —	7150	41.96	10	R. Comercial de Angola
3) RD	7160	41.89	1	R. Cl. de Huambo
2) —	7160	41.89	1	R. Cl. de Benguela
9) RS	7175	41.81	1	R. Cl. do Lobito
4) RM	7230	41.49	0.5	R. Cl. de Mocamedes
3) RD	7280	41.21	1	R. Cl. do Huambo
13) RO	7283	41.20	1	R. Cl. do Bie
7) RP	7285	41.18	0.2	R. Cl. do Cuanza Sul
2) RB	9505	31.56	1	R. Cl. de Benguela
4) RM	9515	31.53	1	R. Cl. de Mocamedes
1) —	9550	31.41	10	R. Comercial de Angola
1) —	9560	31.38	10	R. Comercial de Angola
6) RI	9612	31.21	1	R. Diamang
8) RL	9630	31.15	1	R. Cl. de Angola
3) RD	9665	31.04	1	R. Cl. do Huambo
5) SG	9675	31.01	1	R. Cl. da Huila
10) RZ	9765	30.72	1	R. Angola
6) RR	11700	25.64	1	R. Diamang
1) —	11720	25.60	10	R. Comercial de Angola
1) —	11730	25.58	10	R. Comercial de Angola
12) RB	11755	25.52	1	R. Ecclesia
3) RD	11925	25.03	1	R. Cl. do Huambo
5) SG	11940	25.13	1	R. Cl. da Huila
10) RZ	17705	16.94	10	R. Angola

Medium Waves: °=Short Waves.

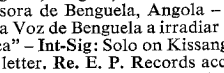
Call	kc	m	kW	Call	kc	m	kW
8) R	°830	361.4	1	4) RM	°1331	225.4	1
12) RB	°1010	297.0	1	14) RW	°1340	224.0	1
9) RS	°1110	270.0	1	10) RZ	°1350	222.2	1/3
1) –	°1150	261.0	1	5) RA	°1367	219.5	1
7) PR	°1160	259.0	1	17) –	1435	209.0	0.5
15) –	°1214	247.0		3) RD	°1500	200.0	0.5
3) RD	°1259	238.0	1	2) –	°1529	196.2	1/3
13) –	°1283	234.0	1	17) –	1550	193.5	0.5

FM: 2) 99.5Mc 0.06kW – 1) 95.5Mc 0.01kW.

1) C.P. 269, Sa da Bandeira. **Te:** 302 – **L.P:** Dir. Gen: A. Maria Telo. Mgr: J. J. A. da Cunha. Dir. Tec: L. Pereira Venâncio. **D.Prgr:** Mon–Fri 05.00–13.00, 15.00–22.00, Sat 05.00–23.00, Sun 07.00–21.00. On 4860/7150kc to 15.00, on 3980/4860kc after 15.00 – **Ann:** "R. Comercial de Angola, A Voz de amizade, com os seus estudios em Sa Da Bandeira" – **V.** by letter. Records accepted – **F.PL:** Sce in English, Afrikaans, German at the beginning of May 1965 to So. & So.We. Africa at 04.00–08.00, 10.00–12.00, 14.00–22.00.

2) C.P. 19, Benguela. **Cable:** Radio Clube. **Te:** 117 – **L.P:** Pres: L. N' Serodio. Chief Prod: A. Freire. **D.Prgr:** W 05.45–07.30, 10.00–13.30. 16.00–23.00. Sun 07.00–14.00, 16.00–21.30 – **N:** W 06.30, 11.30, 18.30, 21.45. Sun 12.30, 18.30 – **Wrp:** after N. 11.30, 18.30 – **Ann:** "R. Clube de Benguela, Angola, Provincia Portuguesa de Africa". "Transmite a Emissora de Benguela, Angola – Provincia Portuguesa de Africa". "Esta é a Voz de Benguela a irradiar de Angola – Provincia Portuguesa de Africa" – **Int-Sig:** Solo on Kissange, a native instrument **V.** by QSL-card or letter. **Re.** E. P. Records accepted.

3) C.P. 125, Nova Lisboa. **Cable:** Radihuambo. **Te:** 41 – **L.P:** Pres: N. D. Ribeiro. Vice Pres: Dr. J. A. Costa. Secr: J. H. Silva – **D.Prgr: Portuguese:** 06.00–07.00, 11.00–13.30; 14.00–22.30. Sun: 06.00–10.00, 11.00–19.00. **N:** 06.05, 11.30, 15.30, 17.00, 19.00, 21.20 on 1259/1500/5060/7160/9665/11925kc and FM. **Wrp:** 11.40, 19.00, 21.27 on 1500/9665kc. **Mbg:** Wed, Sat 06.15–06.40 on 1259/1500/5060/7160kc – **Umbundo (native language):** 17.00–18.00 on 1259/3704kc – **N:** 17.10 – **Ann:** P: "Aqui Angola, Portugal, de Nova Lisboa transmite o R. Clube do Huambo, Una voz portuguesa em Africa" (This is Angola, Portugal, R. Club of Huambo, Nova Lisboa – A Portuguese voice in Africa). **Umbundo:** "Kulo ko Angola Portugal. Ylo ó R. Clube yo Huambo, ko Nova Lisboa. Ocipama cetu ca Cruzeiro do Sul" – **Int-Sig:** Gong.



V. by QSL-card.

4) C.P. 174, Mocamedes. **Cable:** Radioclube. **Te:** 200 – **L.P:** Pres: J. G. Duarte. **D.Prgr:** W 06.00–09.00, 11.00–13.30, 17.30–21.30, Sun 07.00–20.00 on 1331/5015kc. On 3740kc: 17.30–21.30. On 7230/9515kc: 06.00–09.00, 11.00–13.30.– **N:** 06.30(W), 12.00, 19.00. **Ann:** "R. Clube de Moçamedes, em Angola, Provincia Portuguesa de Africa" – **V.** by QSL-card or letter. Records accepted.

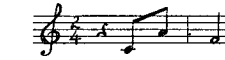
5) C.P. 111, Sá da Bandeira. **Cable:** Radioclube. **Te:** 92 – **L.P:** Pres: Dr. E. de Figueirede Fernandes. Dir. Tec: J. H. Guimaraes – **D.Prgr:** 07.00(Sun 08.30)–10.00 on 1367/5024/9675kc, 12.00–14.30 on 1367/5024/9675/11940kc, 16.30–24.00(Sun 21.00) on 1367/3970/5024kc. **N:** 07.30, 12.30, 19.30 – **Ann:** "R. Clube da Huila em Sá da Bandeira, Angola, Provincia de Portugal em Africa" – **Int-Sig:** First movements from "Bailinho da Madeira" – **V.** by QSL-card. Rp. Records accepted.

6) Dundo, Luanda. **Cable:** Diamang, Portugalia – **L.P:** Dir. Gen: J. A. Dexiga. Dir. Tec: F. O. T. Rego – **D.Prgr:** W 18.00–19.30, Sun 11.00–12.30. R. Diamang is a private st. which aims only to entertain the Diamang employees who work in the mining fields of Luanda. The prgr's are varied and consist only of classic, light and native music – **Ann:** "Aqui Dundo, Angola, Provincia Portuguesa de Africa. R. Diamang. Estação Emissora da Companhia de Diamantes de Angola" – **Int-Sig:** At opening "Marimba" solo (native instrument of percussion similar to the xylophone) – **V.** by QSL-card. **Re.** in P, E, or F.

7) C.P. 10, Novo Redondo – **L.P:** Pres: Eng. C. Horta. Dir. Tec: J. Vilela. **D.Prgr:** W 06.45–08.00, 11.00–13.30, 17.00–21.00. Sun 07.00–10.00, 11.00–19.00 – **Ann:** "R. Clube do Cuanza Sul, Angola, Provincia Portuguesa d'Africa" – **Int-Sig:** National Hymn and Guitar – **V.** by QSL-card.

8) C.P. 229, Luanda. **Cable:** Radangola. **Te:** 3448 – **L.P:** Pres: Com. M. de Albuquerque e Castro. Prod. Mgr: A. Dos Santos de Sousa. Tec. Mgr: B. Victor. Dir. Adm: J. Teles – **D.Prgr:** W 06.00–09.00, 11.00–14.00, 16.00–22.00, Sun 08.00–14.00, 16.00–22.00. **N:** 06.45, 11.45, 12.45, 17.45, 18.45, 21.45. **Mbg:** Sun 08.00 – **Ann:** "Angola, Provincia Portuguesa de Africa, de Luanda emite R. Clube de Angola, a vossa estação...".

Int-Sig:

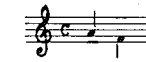


V. by QSL-card and by radio (Sun 08.00). Records accepted.

9) C.P. 56, Lobito. **Te:** 62 – **L.P:** Pres: J. V. Raposo. Dir. Tec: A. Fernandes – **D.Prgr:** W 06.00–07.30, 11.00–13.30, 17.00–22.00, Sun 08.00–20.00. **N:** 07.05, 13.00, 20.00 – **Int-Sig:** Gong – **V.** by QSL-card or letter.

10) C.P. 1321, Luanda. **Te:** 2192 – **L.P:** Dir. Gen: F. de Carvalho. Dir. Tec: J. C. Proença. Dir. Prod: J. A. Pinheiro. Dir. Adm: A. Diogo Jr – **D.Prgr:** On 872/1295kc (10/1kW): W 06.00–09.00, 11.00–13.30, 17.30–23.00, Sun 07.00–23.00. On 3365kc 17.30(Sun 17.00)–23.00. On 3950kc 06.00–09.00(W), 17.30(Sun 18.00)–23.00. On 4820kc 06.00–09.00(W), 17.30(Sun 17.00)–23.00. On 4955kc: as mw (Sun opens at 11.00). On 6025kc as mw. On 6195kc 11.00–13.30 (Sun 07.00–17.00). On 7265kc 06.00–09.00, 11.00–13.30 (Sun 07.00–17.00). On 9765kc 11.00–13.30(Sun 18.00) – **N:** 06.05(W), 08.50(W), 12.00, 17.50, 19.00(W), 20.00(Sun), 22.45 – **French:** D. 11.30–11.50 on 9765kc. **N:** 11.45 – **Ann:** "Aqui Portugal, Emissora Oficial da Provincia de Angola, Luanda" – F: "Ici Luanda Radiodiffusion Nationale Portugaise de la Province de l'Angola" – **V.** by QSL-card. **Re.** very much appreciated.

Int-Sig:



11) C.P. 83, Malanje. **Te:** 30 – **L.P:** Pres: L. P. de Morais – **D.Prgr:** 06.00–08.00, 11.00–13.30, 17.00–21.30, Sun 06.00–09.00, 11.00–20.00. **N:** 06.30, 11.50, 19.00 – **Ann:** "Aqui Portugal transmite o R. Clube de Malanje, em Angola Provincia Portuguesa de Africa" – **Int-Sig:** Some movements from "Reida Festa" on Guitar – **V.** by QSL-card.

12) C.P. 156, Luanda. **Cable:** "Ecclésia". **Te:** 2302 – **L.P:** Dir. Gen: J. M. Pereira. Dir. Tec: J. F. Dimiz da Gama – **D.Prgr:** 05.30–24.00. **N:** 06.00, 11.45, 12.45, 15.00, 18.30, 21.45, 23.45 – **Ann:** "Aqui Portugal R. Ecclésia, Emissora Católica de Angola, em Luanda" – **Int-Sig:** Music from "A Trezo de Maio" – **V.** by QSL-card.

13) C.P. 33, Silva Porto – **L.P:** Pres: T. J. dos Reis Ramos. Dir. Tec: L. Novo – **D.Prgr:** 06.00–08.00, 11.00–13.00, 16.00–21.00. **N:** 06.25, 11.25, 18.25 – **Ann:** "R. Clube do Bie em Silva Porto, Angola, Provincia de Portugal em Africa" – **Int-Sig:** Gong – **V.** by QSL-card. Records accepted.

14) C.P. 116, Cabinda. **Te:** 116 – **L.P:** Pres: Dr. J. Delgado. **D.Prgr:** W 06.00–07.00, 11.00–13.00, 17.00–21.00, Sun 08.00–14.00, 16.00–19.00 – **Ann:** "Aqui Cabinda, Angola, Provincia Portuguesa d'Africa transmite o R. Clube de Cabinda" – **Int-Sig:** Gong – **V.** by QSL-card or letter. Records accepted.

15) C.P. 74, Luso. **Cable:** Radioclube – **L.P:** Pres: M. Simões. Vice Pres: J. P. Albuquerque. Dir. Tec: A. M. Bento. Secr: J. A. de Campos Dias – **D.Prgr:** W 05.30–07.00, 11.00–13.00, 17.30–22.00, Sun

09.00–13.00, 17.00–20.00 – N: 06.15, 11.45, 19.00 – Ann: "R. Clube do Moxico, em Luso, Angola, Provincia Portuguesa em Africa" – Int-Sig: Gong – V. by letter.
16) C.P. 140, Carmona. Cable: Radioclube. Te: 26 – L.P: Pres: J. J. Nogueira. Vice Pres: T. F. de Sousa. Secr: F. Barreia – D.Prgr: W 06.00–07.30, 11.00–13.00(Sat. 14.00), 18.00–21.30, Sun 08.00–10.00, 12.00–17.30. N: 06.30, 12.00, 19.00 – Ann: "R. Clube do Congo Portugues, em Angola, Provincia Portuguesa d'Africa" – Int-Sig: Passarinhos, followed by Portuguese music – V. by letter.

Medium Waves:
17) **A Voz de Luanda,** C.P. 6543, Luanda. Te: 2907 – L.P: Dir. Gen: C. Moutinho. Dir. Tec: A. de Oliveira Lopes – D.Prgr: On 1435kc: 05.00–24.00(Sat 01.00); on 1550kc: 05.00–07.00, 17.00–20.00. N: 11.45. Ann: "Aqui Portugal, da Cidade Capital de Angola transmite "A Voz de Luanda"" – V. by letter. Records acce ted. F.Pl: 1kW.

Wilh. Franz KG, Germany: EMT studio equiqment to Emisora Oficial.

ASCENSION ISLAND (British)

The BBC has placed an order with The Marconi Company for the supply of four 250kW sw-tr's for relay purposes. The st. will make it possible to improve reception of BBC-prgr's throughout West-, Central- & So. Africa, So. America, Caribbean area. Thus it will be especially valuable for the BBC's G.O.S. for English speaking listeners, together with the African Sce. in English and Hausa, the French Sce. for Africa and the Latin American Sce. in Spanish and Portuguese.

BASUTOLAND (Br. Protect.)

L.T: GMT+2 h – Pr.L: Sesotho, English.

RADIO STATION ZNF-4V (Educ)
Owned and operated by Educational Secretary, Roman Catholic Schools, Basutoland – ADDR: Catholic School Secretariat, P.O. Box 80, Maseru. Te: 2525 – L.P: St. Dir: M. Gareau. O.M.I.
STATION: 3824kc 78.46m 0.1kW.
HOME SCE. in Sesotho: Sat 06.30–07.30, 17.30–18.30.
ANN: "ZNF-4V Helehelele Mabeoana" – V. by letter.

BECHUANALAND (British Protectorate)

L.T: GMT+2 h – Pr.L: English.

RADIO STATION ZNB (Go.)
ADDR: Box 253, Mafeking – L.P: St. Dir: D. Strydom.
STATION: 5900kc 50.84m 1kW.
HOME SCE: W 11.00–12.00, 17.00–19.30, Sun 18.00–19.30 – N: 11.15, 17.15 (rel. SABC) – ANN: "This is ZNB at Mafeking calling you" – INT-SIG: ZNB in morse before tr. ann – V. by letter – No QSL-card unless details given. Rp. St. is reported to close in February 1965.

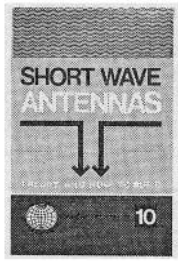
R. STATION ZND (Go.)
Pilot R. project of Bechuanaland Go.
ADDR: P.O. Box 63, Lobatsi. Cable: Bechinform.
STATION: ZND 3356kc 89.50m 1kW.
HOME SCE. in English, Setswana: Mon–Fri 15.30–17.30. N: 16.00 (BBC), 16.10 (local Setswana), 16.30 (local English) – ANN: "Ke tekeletso ka seroma-mowa mo freq. 3.356Mc mo Station ZND kwa Lobatsi" – INT-SIG: Cow bells – V. by QSL-card – F.PL: new st. at Gaberones 1965; 1kW, later 10kW. Prgr. time to 3 h.

BURUNDI (Kingdom)

L.T: GMT+2 h – Pr.L: Kirundi, Kiswahili, French.

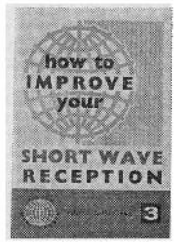
RADIO BURUNDI (Go.)
ADDR: B.P. 1900, Bujumbura. Te: 2236. Cable: Inforburundi – L.P: Dir. Gen: F. Bangemu. Dir. of Inf: L. Kahungu. Dir. Tec: Ch. Laurent.
STATIONS: 1165kc 400W – 6195kc 48.43m 10kW.
HOME SCE. in French, Kirundi, Kiswahili: W: 04.00–05.45, 10.00–11.45, 15.00–20.15(Sat 21.00). Sun: 04.00–12.00, 14.30–20.15. N. in French: 04.45, 10.45, 18.00 – N. in Kirundi/Kiswahili: 05.00, 11.00, 17.30 – L.L: English: Mon, Wed 15.30. French: Tues, Thurs 15.30.
ANN: F: "Ici Bujumbura, station de Radiodiff. Nationale du Burundi émettant dans les bandes des 48m et 252metres, soit 6195kc, 1165kc" – INT-SIG: A Rundi (umuduli) vocal bow: This is an ordinary bow that is stretched over the tendon of an ox, fitted with a calabash bowl instead of a resonance box. This instrument produces a monotonous rhythmical tone consisting of two characteristic sounds – V. by QSL-card. Records accepted –PUB: Prgr.schedule – F.PL: 25kW tr.

RADIO AND TV STANDARD HANDBOOKS
published by
WORLD PUBLICATIONS
Lindorffsallé 1, Hellerup, Denmark



SRORT WAVE ANTENNAS
A valuable handbook which tells in a way easily understood by everybody why an effective antenna is essential in ordrer to obtain satisfactory short wave reception, all the problems connected with this and explains how you yourself can build the various forms of antennas, and which ones can help **you** to get the greatest satisfaction out of your hobby.
Price: Da. Kr. 9.75, US $ 1.25, £ 0/10/0, DM 6.00, Sw. Kr. 7.50 plus transport: Da. Kr. 1.35, US $ 0.20, £ 0/1/6, DM 0.80, Sw. Kr. 0.60.

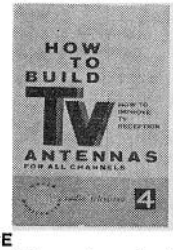
HOW TO IMPROVE YOUR SHORT WAVE RECEPTION
A practical handbook for short wave enthusiasts who wish to know all about short wave reception, the technical aids and means of improving it, and who wish themselves to build short wave receivers or means to improve short wave reception.
Price: Da. Kr. 13.75, US $ 2.00, £ 0/13/6, DM 9.00, Sw. Kr. 9.75 plus transport: Da. Kr. 1.35, US $ 0.25, £ 0/1/6, DM 0.80, Sw. Kr. 0.60.



WORLD RADIO BULLETIN
Published fortnightly. Contains the latest news from broadcasting stations all over the world and thus enables you to keep your listening up to date.
Price: **Airmail, annually:** Da. Kr. 50.00, US $ 7.30, £ 2/12/0, DM 30.00, Sw. Kr. 38.50. **Six months:** Da. Kr. 30.00, £ 1/12/0, US $ 4.00, DM 18.00. **Seamail, annually:** Da. Kr. 33.00, US $ 5.00, £ 1/15/0, DM 20.00, Sw. Kr. 25.00. **Six months:** Da. Kr. 18.00, £ 1/-/-, US $ 3.00, DM 12.00, Sw. Kr. 15.00.

HOW TO IMPROVE YOUR TV-RECEPTION
This book will prove useful to technicians, amateurs, the technical staff of TV-stations, TV-DX'ers and all those who want to improve their TV-reception and to gain knowledge of the technique of television. Easy to understand. Throughout illustrated with photos and drawings.
Price: Da. Kr. 13.75, US $ 2.00, £ 0/14/6, DM 8.80, Sw. Kr. 10.50.

HOW TO BUILD TV-ANTENNAS
New edition.
An account of all the problems connected with TV-antennas and instructions for building TV-antennas for all channels and systems incl. U.H.F.
Price: Da. Kr. 16.50, US $ 2.50, £ 0/17/0, DM 10.00, Sw. Kr. 12.50; plus transport: As for How to improve your S.W. reception.



TRANSISTORS — THEORY AND PRACTICE
For technicans and amateurs who want to obtain a theoretical and practical knowledge of transistor technique.
Price: Da Kr. 9.75, US $ 1.50, £ 0/9/6, DM 6.00, Sw. Kr. 7.50. Plus transport: Da. Kr. 0.80, US $ 0.15, £ 0/1/0, DM 0.55, Sw. Kr. 0.60.

Obtainable from your bookseller or direct from
WORLD PUBLICATIONS
Lindorffsallé 1, Hellerup, Denmark

RADIO CORDAC (Corporation de Radiodiffusion de l'Afrique Central – Central African Broadcasting Company, a Missionary Boadc. Station).
ADDR: B.P. 1140, Bujumbura. Te: 2503. Cable: "Cordac – L.P.: Dir. of Inf: R. D. Kellum. Dir. Tec: J. E. Morris.
STATIONS (Systems: Raytheon, Hallicrafter): 9UB93 1400kc 0.25kW – 9UB92 3985kc 75.38m 0.25kW – 9UB94 4920kc 60.98m 0.5kW.
HOME SCE. (rlg. prgr's) in Kirundi, Kiswahili, French, English: D. 04.00–05.30, 10.00–11.00, 18.00–19.15 (religious and musical prgr's): English: 05.16–05.30, 18.00–18.15, 19.00–19.15. French: 05.00–05.15, 10.00–11.00, 18.45–19.00. Other times in Kirundi, Kiswahili.

ANN: E: "This is Cordac Bujumbura, Burundi. The Central Africa Broadc. Co. Incorporated".– INT-SIG: "Come Ye thankful people come" played on Carillon – V. by QSL-card. Records accepted. Rp.
PUB: "News Flashes" monthly bulletin in English, Kirundi free upon request. F.PL: 2.5kW.

CAMEROON (Federal Republic of)

L.T: GMT+1 h – Pr.L: French, English, Vernaculars.

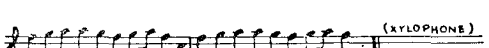
RADIODIFFUSION DU CAMEROUN (Go.)
ADDR: B.P. 281, Yaounde. Te: 2515. Cable: "Radiocameroun" – L.P: Federal Dir: A. Moutongo Black. Dir. Fed. Adjoint: J. Foualem-Fotso. Dir. Prgr: J. L. Bitchoka, J. F. Sembey. Dir. News: D. Amiot-Priso. Dir. Tec: M. Kamdem.

RADIO YAOUNDE (Nat. st.)
ADDR: B.P. 281, Yaounde. Cable: "Radio Yaounde". Te: 2517 – L.P: Dir: J. Moudiki. Dir. Prgr: L. Kabouth. Dir. Tec: S. M'Poual.
STATIONS: m.w. 1kW, s.w. 4/30kW.
1286kc 233m – 4972.5kc 60.33m – 6040kc 49.67m.
HOME SCE: Mon–Fri: 04.30–07.00 on 1286/4972.5kc, 11.00–14.00 on 1286/6040kc, 16.00–22.00 on 1286/4972.5kc. Sat: 05.30–07.00, 11.00–23.00 on 1286/4972.5kc (11.00–17.00 also 6040kc). Sun 05.00–23.00 on 1286/4972.5kc (06.30–17.00 also 6040kc).
French: W: 05.30–07.00, 11.00–13.00, 17.00–19.00, 19.20–22.00. Sat: 05.30–07.00, 11.00–13.30, 14.45–19.00, 19.20–23.00. Sun:06.30–13.30, 15.15–19.00, 19.20–23.00. English: W: 04.30–05.30, 13.00–14.00, 16.00–17.00, 19.00–19.20. Sat: 04.30–05.30, 13.30–14.45, 19.00–19.20, Sun: 05.00–06.30, 13.30–15.15, 19.00–19.20. Vernaculars: Tues 17.00–17.30 (Ewondo); Wed 17.00–17.30 (Bamiléké).
N: W: 06.15, 12.00(Sat 12.15), 17.30, 18.30, 21.30; Sun: 06.30, 07.50, 12.00, 17.30, 18.30, 21.30.

ANN: "Ici Yaoundé, Radiodiff. de la République Fédérale du Cameroun, Poste National" – INT-SIG: Local music on balafon – V. by QSL-card or letter. Rp. Re. in English, French.

RADIO DOUALA (Go.)
ADDR: B.P. 986, Douala. Cable: Radio Douala. Te: 4575 – L.P: Dir: F. Mouasso-Priso. Dir. Tec: S. Diffoum. Dir. Prgr: A. Ngangue.
STATIONS: 1448kc 207.2m – 6115kc 49.06m 1kW.
HOME SCE. in French, Douala, Bassa, Bamileke, Ewondo: W: 05.15–07.00, 11.15–13.00, 17.00(Sat 15.00)–21.00; Sun: 07.30–21.30. N. in French relayed from R. Yaounde.

ANN: F: "Ici Douala, Radiodiff. du Cameroun" – INT-SIG: At opening and close down and 11.15 and 17.00: Hymn of Cameroon: "O Cameroun berceau de nos ancêtres" fanfare.



V. by QSL-card or letter. Rp – PUB: Prgr.sched. (weekly).

RADIO GAROUA (Go.)
ADDR: B.P. 103, Garoua. Te: 012 – L.P: Dir: B. Malgana. Dir. Tec: I. Nkembe. Dir. Prgr: Mme. J. Bello.
STATIONS: mw 1kW, sw 4/30kW.
1348kc 224.0m – 5010kc 59.88m – 7240kc 41.44m
HOME SCE. in French, Hausa, Foulfouldé on 5010kc: W: 11.15–13.15 (Thurs, Sat 13.00, Fri 14.00), 17.00–22.00; Sun: 07.00–13.15, 16.00–22.00 – French: 11.15–12.30 (Sun 07.00–12.30), 17.00(Sun 16.00)–19.00.

ANN: "Ici Garoua, Radiodiff. du Cameroun" – INT-SIG: Flute & tamtam – V. by QSL-card.

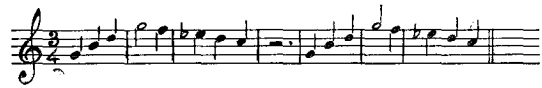
RADIO BUEA (Go.)
ADDR: B.P. 281, Yaounde – L.P: Dir: S. Njossa. Dir. Tec: T. Mbiangue.
STATION: 5984kc 50.13m 1kW.
HOME SCE. in French: 05.00–07.00(Sun 11.00), 13.30–21.30 – N (relayed from R. Yaounde): 05.15, 13.30, 16.30, 19.00, 21.25.

CANARY ISLANDS (Spanish)

L.T: GMT – Pr.L: Spanish.

RADIO NACIONAL DE ESPAÑA (Centro Emisor del Atlántico)
ADDR: Valentin Sanz 4, Pisos 5°y 6°, Sta. Cruz de Tenerife.
Te: 244187 – L.P: Dir: D.D. Manfredi Cano.
STATION: 620kc 483m 100kW – ANN: "R. Nacional de España en Canarias, Centro Emisor del Atlántico" – INT-SIG: Marcha de "La Generala".

RADIO ATLANTICO (Comm.)
ADDR: Ca. General Franco 50, Las Palmas. Cable: Radio Atlantico. Te: 21083 – L.P: Dir: Jose A. Gutierrez Peña. Dir. Tec: J. J. Quevedo Bautista.
STATIONS: 1484kc 202.2m 10kW – 7000kc 42.86m 1kW – 9400kc 31.92m 5kW – FM: 93.9Mc 5kW.
HOME SCE. in Spanish: On 1484kc: D 06.55–00.15 – N: 08.00*, 08.45, 13.30*, 14.00, 20.00, 21.00*, 24.00* (*rel. R. Nacional) –T.S: 08.00, 24.00 – For Tourists (in English, Swedish, German): 09.00, 19.00.
ANN: Sp: "Transmite R. Atlantico, E.C.S. no 4, Emisora Sindical de las Palmas de Gran Canaria Islas Canarias" – INT-SIG: Canary guitar-chords – V. by QSL-card or letter. Records accepted.



RADIO CLUBE TENERIFE (Cultural)
ADDR: Suárez Guerra 49, Santa Cruz de Tenerife. Te: 243542 – L.P: Pres: F. A. Acuña Dorta. Secr: J. Siliuto Méndez.
STATIONS: EAJ43 1412kc 212.4m 0.4kW: 08.00–24.00.
ANN: "R. Club Tenerife, en Santa Cruz de Tenerife, Islas Canarias" – INT-SIG: 22.00 "Islas Canarias". Close 24.00 with Nat. Anthem – V. by QSL-card.

RADIO JUVENTUD DE CANARIAS (C.A.R.)
ADDR: Castillo 27, Santa Cruz de Tenerife. Te: 3692 – L.P: Dir: D.M.A. Yanes Contreras.
STATION: EFJ57 1248kc 240m 1kW – HOME SCE: 07.00–01.00.
ANN: "R. Juventud de Canarias" – INT-SIG: The first notes from "Arroro canario" – V. by letter.

RADIO LAS PALMAS (Comm.)
AD: 10 min. per h – ADDR: Calle Triana 134, Dpdo, Las Palmas. Cable: Radio Las Palmas. Te: 20351 – S.
STATION: EAJ50 1313kc 228.5m 5kW.
HOME SCE: D 08.00–01.00 – N: 09.15, 13.30, 14.15 (local), 21.00 –
ANN: "Transmite E.A.J.50 Radio Las Palmas" – INT-SIG: Pasodoble "Islas Canarias" (orchestral) – V. by QSL-card. Records accepted.

RADIO POPULAR DE GÜIMAR
ADDR: San Pedro Arriba 4, Güimar (Tenerife) – L.P: Dir: R.P.D.P. Redondo-Camarero. Dir. adjoint: D.C. Torres Bardó.
STATION: EAK 1304kc 230m 0.5kW – HOME SCE: 08.00–12.00, 13.00–19.00, 20.00–24.00 – ANN: "R. Popular de Güimar, Emisora diocesana, Villa de Güimar, Tenerife.

LA VOZ DE LA ISLA DE LA PALMA
ADDR: Emisora Sindical, Santa Cruz de la Palma. Te: 862. Cable: Emisora – L.P: Dir: M. Fernández de las Casas. Dir. Tec: E. Fuillerat
STATION: 7345kc 40.85m 0.35kW.
HOME SCE in Spanish: 08.00–09.00, 12.00–16.00, 18.00–23.00. N: 09.10, 12.10, 13.30*, 14.15, 21.00*, (*=rel. R.N.E.)
ANN: "La Voz de la Isla de la Palma Emisora Sindical, Santa Cruz de la Palma" – INT-SIG: "La Orgia Dorada" (Military March) – V. by letter. Records accepted.

LA VOZ DEL VALLE DE LA OROTAVA
ADDR: Plaza del Ayuntamiento, Villa de la Orotava – L.P: Dir: D.J. Siverio Pérez.
STATION: ESC25 1480kc 202.7m 0.4kW – ANN: "La Voz del Valle de la Orotava, Emisora Sindical, la Orotava, Tenerife".

LAVOZ DE CANARIAS
ADDR: Ca. Mendez Nuñez 80, Sta. Cruz de Tenerife.
L.P: Dir: D.A. Cruz Garcia – STATION: FM: 90.6Mc: 19.00–23.00.

CAPE VERDE ISLANDS (Portuguese)

L.T: GMT–2 h – Pr.L: Portuguese, English. Fee: 100 Escudos.

RADIO CLUBE DE CABO VERDE (Pr.)
FI: By Go. and adv – ADDR: C.P. 26, Praia. Cable: "Radio clube". Te: 344 – L.P: Pres: Dr. A. de Cunha Leal. Dir. Tec: F. A. da Cunha. Dir. Prgr: J. Cardoso.

STATIONS: (System RCA, Hallicrafters):
3960kc 75.76m 5kW – 6025kc 49.79m 0.5kW.
HOME SCE. in Portuguese: 08.45-09.45, 14.15–16.15 (Sat 15.00–18.00, Sun 12.00–14.00) on 6025kc, D: 20.00–22.00 on 3960kc – N: 09.15, 15.30, 21.30 – Mbg: Wed 21.00 – "Panorama Caboverdeano": Fri 21.00 – ANN: "Aqui Praia Estação de Ondas Curtas do R. Clube de Cabo Verde" – INT-SIG: Five notes on marimba – V. by QSL-card. Rp. Records accepted – F.PL: 25kW mw-tr, 30kW sw-tr; tr's to São Tomé, Angola & Mocambique.

R. BARLAVENTO (Go.)

FI: By Go. and adv – ADDR: C.P. 29, S. Vicente – L.P: Dir. Gen: J. M. Povoa & A. L. da Silva. Mgr: A. C. Salomão. Dir. Tec: T. Barrio Vieira.
STATION: (System: Philips): CR4AC 3960kc 75.76m 1kW.
HOME SCE: W: 14.30–15.30, 22.00–24.00. Sun: 11.00–13.00, 15.00–17.00, 22.00–24.00 – N: 14.30, 22.30.

ANN: "Aqui S. Vicente de Cabo Verde, Provincia Ultramarina de Portugal. Fala-vos CR4AC, estação de ondas curtas da R. Barlavento, que emite, diariamente, no comprimento de onda de 75m, freq. de ç960kc" – INT-SIG: Gong and "Cabo Verde Terra Minha" (folklore) on accordeon – V. by QSL-card. Rp. Records accepted – F.PL: 10kW tr.

RADIO CLUBE MINDELO (Pr.)

FI: By state adv. and private help – ADDR: C.P. 101, S. Vicente. Te: 476 – L.P: Dir. Gen: F. J. Martins. Mgr: A. Morais. Dir. Tec: J. de Azevedo.

STATION: CR4AB 4755kc 63.09m 0.25/0.45kW.
HOME SCE: 09.00–09.55, 10.00–11.00, 13.00–15.00, 20.30–22.00 – N: 21.00.

ANN: "Aqui R. Clube Mindelo estação de ondas curtas operando no comprimento de ondas de 63.09m freq. de 4755kc". V. by QSL-card or letter. Records accepted – F.PL: 1kW (Jan 65).

CENTRAL AFRICAN REPUBLIC

L.T: GMT+1 h – Pr.L: French, Sango.

RADIODIFFUSION NATIONALE CENTRE-AFRICAINE

FI: By state – ADDR: P.B. 940, Bangui. Te: 2357 – L.P: Dir. V. Teteya. Dir. Tec: M. Mercier.
STATIONS: mw 1kW, sw 30kW (System: TRT):
1570kc 190m – 5035kc 59.58m – 7220kc 41.55m.

HOME SCE. in French & Vernaculars:
Mon–Fri 04.30–06.30, 16.30–21.00 on 1570/5035kc, 11.00–12.30 on 1570/7220kc; Sat 04.30–06.30, 16.30–22.15 on 1570/5035kc, 11.00–16.30 on 1570/7220kc; Sun 06.00–16.30 on 1570/7220kc, 16.30–21.00 on 1570/5035kc.
N. in French: 05.00(W), 06.00(W), 09.00(Sun) 11.45, 18.30, 20.50.
N. in Sango: 05.30(W), 08.15(Sun), 12.10, 17.15 – L.L (English): Mon, Thurs 05.10, 17.00 – Mbg: Sun 17.30.

ANN: "Ici Bangui Radiodiff. Nationale Centrafricaine" – INT-SIG: First seven bars of C. African Hymn, played on the Zanza (a local instrument) – V. by QSL-card, Re. in French. Records accepted.

CHAD (Rep. of the)

L.T: GMT+1 h – Pr.L: French, Arabic, Sara.

RADIODIFFUSION NATIONALE TCHADIENNE

ADDR: B.P. 168, Fort Lamy. Cable: Radio Tchad. Te: 2273 – L.P: Dir: O. Touade. Dir. Tec: G. Preud'homme. Dir. Centre B.F: J-P. Dumont. Dir. Prgr: Mme J. Wolny-Dumont.
STATIONS: 1538kc 195. Om 1kW – 4904kc 61.18m 30kW.
6165kc 48.66m 30kW – 9615kc 31.20m 4kW.
HOME SCE. in French, Arabic, Sara: W 05.00–06.00, 17.00–21.30 (Sat 23.00) on 1538/4904kc, 12.00–17.00 on 1538/6165/9615kc, Sun 05.00–06.50, 17.00–21.30 on 1538/4904kc, 06.55–17.00 on 1538/6165/9615kc.
French: W 05.30–06.00, 11.00–14.00, 19.00–21.20, Sun 05.00–05.15, 05.45–13.00, 18.20–21.20. N: 05.50(W), 12.30, 19.00, 21.15 – L.L (English): Wed, Fri 13.45.
Sara: W 05.01–05.20, 14.00–16.30, 21.25–21.30, Sun 05.15–05.30, 13.00–15.40, 21.25–21.30. N: 05.15, 15.00, 21.25.
Arabic: W 05.20–05.40, 16.30–19.00, 21.20–21.25, Sun 05.30–05.45, 15.40–18.20, 21.20–21.25. N: 05.30, 17.50(Sun), 18.00(W), 21.20.

ANN: "Ici Fort Lamy, Radiodiff. Nationale Tchadienne émettant dans les bandes..." or "Ici Fort Lamy, Radiodiff. Nationale Tchadienne" – INT-SIG: Balafon – V. by letter. Rp. Records accepted – F.PL: Increase of Nat. net. through satellite st's. International net – PUB: Prgr. schedule (weekly).

COMORES ISLANDS (French)

L.T: GMT+3 h – Pr.L: French, Vernaculars.

RADIODIFFUSION TELEVISION FRANCAISE (Go.)

ADDR: B.P. 29, Dzaoudzi, Ile Mayotte, Comores. Te: 25 – L.P: Dir. Gen: A. Sabas.
STATIONS: 3331kc 90.06m – 7260kc 41.32m 4kW.
HOME SCE. in French, Comorian: W: 03.30–05.00 on 3331kc, 09.15–10.30 on 7260kc, 15.30–19.00 on 3331kc; Sun: 05.00–07.00 on 3331kc, 07.00–10.45 on 7260kc, 14.30–19.30 on 3331kc – N: French: 04.00, 09.30, 19.00 – Comorian: 03.45 (Sun 05.15), 17.15 – Wrp: 09.30 – T.S: 04.00, 09.30, 17.00 – ANN: "Ici les Comores – office de Radiodiff-Télévision-Française, station de Dzaoudzi – INT-SIG: Folklore Music played on native instrument – V. by letter. Rp. Records accepted – PUB: Prgr.schedule (monthly).

CONGO (Dem. Rep. of)

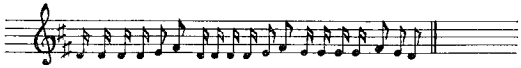
L.T: Leopoldville, Coquilhatville: GMT+1 h; Elisabethville, Stanleyville, Bukavu, Luluabourg: GMT+2 h – Pr.L: French, Lingala, Kikongo, Tshiluba, Swahili.

RADIODIFFUSION DE LA REPUBLIQUE DEMOCRATIQUE DU CONGO (Go.)

ADDR: Nat. Service: B.P. 3171. Leopoldville. Te: 3171.
STATIONS:

kc	m	kW	kc	m	kW	kc	m	kW
4880	61.48	7.5	7170	41.84	10	9660	31.06	50
7130	42.08	10	9625	31.27	50	11830	25.36	50

NATIONAL PRGR (Leopoldville):
French: 04.00–07.00 (Sun 09.00) on 4880/7170/9660kc; 10.00–13.00 (Sun 15.30) on 9660/11830kc; 15.30–18.00 on 9660/11830kc; 18.00–21.00 on 7170/9660kc. N: 04.30, 05.30, 06.30, 10.30, 11.30, 12.30, 16.30, 18.30, 19.30, 20.30. Vernaculars: W 04.00–07.00, 10.00–13.00, 15.00–21.00, Sun 04.00–09.00, 10.00–21.00 on 9625kc.
Tshiluba/Swahili: 04.00–05.30, 10.00–11.30, 15.00–18.00. N: in Tshiluba: 04.45, 11.15, 17.15. N. in Swahili: 05.00, 11.00, 17.00–
Lingala/Kikongo: 05.30–07.00, 11.30–13.00, 18.00–21.00. N: 06.00, 11.45, 18.30, 20.00 –
ANN: F: "Ici Leopoldville, Radiodiff. de la Republique Democratique du Congo" – INT-SIG: Tam Tam (native xylophone beat) –



REGIONAL STATIONS (in French and reg. languages):
R. Leopoldville: 4880kc 61.48m 10kW: 04.00–06.30, 10.30–13.00, 16.00–20.30.
R. Coquilhatville: Addr: B.P. 1061, Coquilhatville.
5993kc 50.05m 10kW: 05.00–07.00, 10.00–13.00, 15.30–21.00.
N. in French: 11.45 – ANN: "Ici Coquilhatville, station interprovinciale de Coquilhatville" – V. by letter. Records accepted. Prgr schedule free.
R. Bukavu: Addr: B.P. 475, Bukavu.
4839kc 61.99m 10kW: 04.00–06.00, 10.00–12.00, 15.00–20.00(Sat/Sun 22.00).
R. Luluabourg: 6125kc 48.98m 10kW: 15.30–19.30.
R. Stanleyville: Addr: B.P. 1745, Stanleyville.
6080kc 49.34m 10kW: 04.00–06.30(Sun 07.00), 10.00–12.30(Sat/Sun 13.00) 15.30(Sun 15.00)–20.00 (Sat 22.00).
R. Elisabethville: Addr: B.P. 1038, Elisabethville.
5960kc 50.34m 10kW – 9540kc 31.45m 20kW – 11870kc 25.27m 100kW
Home sce in French, Tshiluba, Lingala: 04.30–07.00, 10.00–12.00, 15.00–20.00 on 5960/9540kc. N in French: 05.30, 06.30, 10.30, 11.30, 18.30.
R. Bakwanga: 7295kc 41.12m 10kW.

Brown Boveri, Switzerland, delivered 10kW tr's to Leopoldville (3 × 10), Bukavu, Stanleyville, Coquilhatville, Luluabourg, Elisabethville (3 × 10); 100kW tr. (Elisabethville) – The Marconi Company Ltd, G.B: One 10kW tr. Wilh. Franz KG, Germany: EMT studio equip.

RADIO COLLEGE (Rlg – educ).

FI: by free will offerings – ADDR: Collège S. Francois de Sales, B.P. 296, Elisabethville. Te: 5301 – L.P: Dir. Gen. RR. PP. Salesiens. Dir. Tec: R.P.J. Dethier. Dir. of Prgr's: R.P.A. Richard.
STATIONS (Systems: Bauer, Gates): 0Q2AC
1500kc 200m 1kW – 3390kc 88.50m 1kW – 5050kc 59.41m 1kW – 7200kc 41.67m 1kW – FM: 96Mc 0.05kW.
HOME SCE. on French, Swahili, Kibemba: W 15.30–19.30, Sun 07.00–10.00, 18.30–19.30.

ANN: "Ici R. Collège, station de radiodiffusion privée" – INT-SIG: At opening "Marche du Baron Tzigane" (by Joh. Strauss), at closing "Marche Indigo" (by Joh. Strauss) – V. by letter – F.PL: A second prgr, TV – PUB: Monthly prgr. bulletin.

RADIO LEO (Rlg-educ.)
(Owned and operated by College Albert Ier)
ADDR: B.P. 3165 Leopoldville-Kalina. Te: 2438 – L.P: Dir. Gen: L. Rinen. S.J. Dir. Tec: A. Granville.
STATION (System CFTH): OQ2AA 11720kc 25.60m 50kW.
HOME SCE. in French, Lingala, Kikongo, Tschiluba, Swahili: 08.00–10.00.
ANN: "Ici R. Leo, Leopoldville, Rép. Democratique du Congo, st. privée du College Albert Ier, longueur d'ondes 25m 60 ou 11720kc" – INT-SIG: First Movements of Andante non troppe of "Duo für Glasharmonika und Laute" in G minor by J. Naumann.

RADIODIFFUSION UFAC (Priv.):
ADDR: B.P. 97, Elisabethville – STATION: 4980kc 60.25m 1kW – HOME SCE in French, English, Kiswahili: 15.45(Sun 13.00) – 19.30. English: D 16.00–17.00(Rel. prgr's).
ANN: F: "Ici Radiodif. Ufac, station privée à Elisabethville". E: "This is R. Ufac, Elisabethville" – INT-SIG: Organ.

CONGO (Rep.)

L.T: GMT+1 h – Pr.L: French, English, Portuguese.

RADIO BRAZZAVILLE (Radiodif. Télévision Francaise)
ADDR: B.P. 108, Brazzaville – Cable: Radiodiffusion. Te: 2234. L.P: St.Mgr: H. Defroyenne. Dir. Adm: A. Taillade. Chief of Inf: L. Baissat.

STATIONS:

kc	m	kW	kc	m	kW	kc	m	kW
4795	62.47	4	11710	25.62	50	15370	19.52	50
5970	50.25	4	11725	25.58	50	15445	19.43	50
7105	42.22	4/50	11970	25.06	50	17720	16.93	50
9730	30.83	1.5	15190	19.75	50	21500	13.90	1.5/50

INTERNATIONAL SERVICE
I=We, C. & Ea. Africa; II=Madagascar; III=Far East.

Times	Areas	kc	N
05.00–07.15	I+II	15445, 11725, 9730 4795, 5970	F: 05.00, 06.00, 07.00; E: 05.15
10.30–12.20	I	15445, 11970	E: 11.00, 12.00, P: 10.40, 11.40
11.00–12.30	I	21500, 15190[1] 11710, 7105	F: 11.30
12.30–13.00	I+III	21500, 17720, 15445 11710, 7105	F: 12.45
13.00–13.30	III	17720	E: 13.00
13.30–14.50	III	21500, 17720	F: 13.30, 14.30, E: 14.00
16.00–21.00	I	21500, 15190[2], 11710[3], 11970[4], 11725[5], 9730, 7105, 5970	F: 16.00, 17.30, 18.00, 19.00, 20.30. E: 17.00, P: 18.45
19.00–20.00	I	15190	E: 19.30

[1] until 12.00; [2] from 17.30 and at 19.00 replaced by 15370kc; [3] 16.00–17.30; [4] 17.30–19.15; [5] 19.15–21.00.
Special Sun. prgr. 14.00–17.00 "Sport & Music" (relayed from Paris) on 7105, 11725, 17720, 21500kc.

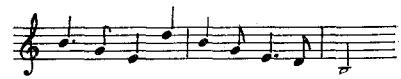
ANN: F: "Ici R. Brazzaville". E: "This is R. Brazzaville broadcasting from the Congo". P: "Aqui R. Brazzaville, Brazzaville".
INT-SIG: Five different notes played on a native instrument (Kisanzi) consisting of several vibrating iron bars attached to a wooden box – V. by QSL-card or letter. Rp. – PUB: Prgr.sched. free

RADIODIFFUSION TELEVISION CONGOLAISE (Go.)
ADDR: B.P. 2241, Brazzaville. Cable: Radio Congo. Te: 2408. L.P: Dir: Malonga. Dir. Tec: J. Vassalo. Dir. Prgr: Bitouloulou.

STATIONS (System: TRT, CFTH).
1484kc 202.2m 4kW – 7175kc 41.81m 25kW
3264kc 91.90m 4kW – 4843kc 61.95m 25kW

HOME SCE. in French, Lingala, Munukutuba: W 04.30–06.30 on 1484/3264/4843kc, 11.00–13.00 on 1484/7175kc, 15.30–21.00(Sat 22.00) on 1484/3264/4843kc, Sun 04.30–07.00 on 1484/3264/4843kc, 07.00–17.00 on 1484/7175kc, 17.00–21.00 on 1484/3264/4843kc. On 9715kc: D 17.00–19.00. N: French: W 05.15, 12.00, 17.00, 18.30, 20.30 – Sun 12.00, 17.15, 18.30, 20.30 – Lingala: 18.10. Munukutuba: 18.20 – Wrp: 19.00 – Mbg: 11.30 – L.L: "Le Français par la Radio": Mon, Wed 16.00, Tues 05.45, Fri 05.30.

ANN: F: "Ici Radiodiff. Télévision Congolaise, emettant de Brazzaville" – V. by QSL-card. Rp. Records accepted – INT-SIG: Zanzi solo (native instrument).



DAHOMEY (Republic)

L.T: GMT+1 h – Pr.L: French, Vernaculars

RADIODIFFUSION DU DAHOMEY (Go.)
Fee: 500 CFA – ADDR: B.P. 366, Cotonou. Cable: Radiodahomey. Te: 2040 – L.P: Dir: H. da Piedade. Dir. Tec: M. Detien-Honvo. Dir. Prgr: I. Zounon. Dir. N: J. Vyera.

STATIONS: 1475kc 203.4m 1kW
3270kc 91.74m 4kW – 4870kc 61.60m 30kW.
HOME SCE. in French, Fon, Yoruba, Dendi, Bariba. Mina: Mon–Fri: 05.15–06.45, 11.15–12.45(Thurs 13.00), 16.45–22.00; Sat: 05.15–06.45, 12.00–23.00; Sun 07.00–22.00 – N: French: W: 05.35, 06.15, 11.40 (not Sat), 12.40(Thurs 12.55), 15.00(Sat), 16.45, 19.00, 21.15, 21.55, 22.15 (Sat). Sun: 08.00, 11.40, 14.00, 17.00, 19.00, 21.55. Vernaculars: 12.10–12.25 (Sat 13.10–13.25), 16.50–18.25 (Sun 17.15–18.50) – L. L.: (English): 05.55–06.15 (Mon, Wed, Fri), 18.25–18.45 (Tues, Thurs, Sat) – Magazine du Dahomey: Sun 11.00 – Educational Prgr: Mon, Wed 19.30

ANN: French: "Ici Cotonou, Radiodiff. du Dahomey émettant sur..."
INT-SIG: Dahomey Tam-Tam – V. by QSL-card. Rp. Records accepted – F.PL: Nat. prgr. on 3270kc, new 1kW mw-st. at Parakou early 1965 – PUB: Prgr.schedule (weekly).

EGYPT (United Arab Rep.)

L.T: GMT+2 h (Su. 1/5–30/9 GMT+3 h) – Pr.L: Arabic.

U.A.R. BROADCASTING CORPORATION OF CAIRO (Go.)
FI: By state subsidy, adv, Electric Current taxes – AD: allowed in Popular-Cultural Prgr and Middle East Prgr – ADDR: Prgr. Authority: U.A.R. Broadc. & TV Corpo, 4 El Sherifein Str, Cairo. Cable: "Kahiradio", Engineering Authority: General Egyptian Organisation for Cinema, Broadc. & TV: TV-Bldg, Cornish Rd, Cairo. Cable: Cibrotev – L.P: Prgr. Authorities: Dir. Gen: M. A. Hamad. Dir. Sound Prgrs: A. H. El-Hadidy. Dir. TV Prgr's: H. Helmy. Dir. Adm: M. M. Taifour. Gen. Contr. of Research and Internat. Rel: M. El-Bassiouni. Eng. Authorities: Chmn. of Board of Dir's: S. Amer. Dir. Egyptian Organisation for Cinema, Radio & TV: A. Zayan. Dir. Engineering Broadc. & TV: A. Kandeel.

STATIONS: Medium Waves

kc	m	kW		kc	m	kW
Cairo III	557	538.6	50	Assiout	980	306.1	5
Cairo VI	602	498.4	50	Minia	1079	278.0	5
Batra I	620	483.9	450	Luxor	1079	278.0	5
Cairo II	710	422.0	100	Sohag	1142	262.2	5
Cairo I	773	388.1	500	Asswan I	1178	254.7	10
Batra II	818	366.7	450	Alexandria	1277	234.9	10
Cairo V	872	344.0	50	Asswan II	1277	234.9	10
Cairo IV	926	324.0	10				

Short Waves: 50/70/90/100kW

kc	m	kc	m	kc	m	kc	m	kc	m
6080	49.34	9495	31.60	9775	30.69	11940	25.13	15475	19.38
7050	42.55	9595	31.27	9780	30.68	11980	25.04	17690	16.96
7075	42.40	9630	31.04	9790	30.64	12050	24.90	17730	16.92
7140	42.02	9665	31.04	9815	30.60	15115	19.85	17760	16.89
7180	41.78	9715	30.88	9819	30.57	15210	19.72	17785	16.87
7300	41.09	9750	30.77	11745	25.54	15310	19.60	17875	16.79
9475	31.66	9755	30.76	11915	25.18	15350	19.54	17905	16.75
				11930	25.15	15430	19.44	17920	16.74

HOME SERVICE
MAIN ARABIC PRGR * Fridays only.
03.55–06.00 on 818/1079/1142/1277/7075/9780/15475kc
06.00–07.00 on 818/980/1079/1142/1277/9780/11980/15475kc
07.00–08.00 on 872/980/1079/1142/1277/9780/11980kc
07.00–09.00* on 872/980/1079/1142/1277/9780/11980kc
08.00–11.00 on 872/980/1079/1142/1277/9780/11980kc
09.00–11.00* on 872/980/1079/1142/1277/9790/11980/15475kc
11.00–14.00 on 818/980/1079/1142/1277/9790/11980/15475kc
14.00–14.45 on 818/980/1079/1142/1277/7075/9790/15475kc
14.45–21.15 on 773/980/1079/1142/1277/7075/9790/15475kc
21.15–23.45 on 818/980/1079/1142/1277/7075/9790/15475kc

N: 05.00, 12.30, 15.00, 18.30, 21.00, 23.30 – Comm: 05.00, 12.45, 15.30, 18.45 – Nat. Music: 05.30, 09.30, 11.00, 19.25 – Prgr. Preview: 04.44, 14.45 – T.S: Cairo University Clock at the beginning of the main news bulletins.

RADIO VOICE OF THE GOSPEL

Owned and operated by the Lutheran World Federation Broadcasting Service

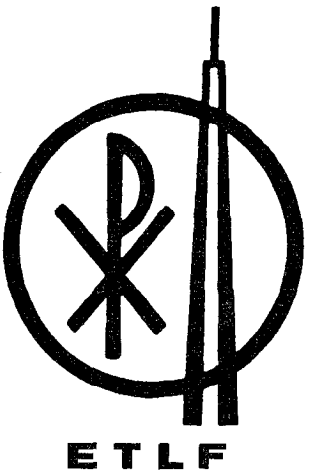
PROGRAMS IN –

English, Afrikaans, Arabic
Amharic, Malagasy, Nyanja
Persian, Sinhalese, Sotho
Swahili, Tamil, Telugu, Zulu

FOR LISTENERS IN –

Africa
Middle East
Southeast Asia

RADIO VOICE OF THE GOSPEL
P. O. BOX 654
ADDIS ABABA, ETHIOPIA



VOICE OF ARABS:
03.00–07.00 on 620/1178/7050/11745kc, 07.00–09.00(Tues 10.00) on 710/1178/7050/11745kc, 09.00(Tues 10.00)–14.00 on 620/1178/7050/11745kc, 14.00–00.20 on 620/1178/7050/9495/11745kc.
N, Comm: 03.30, 04.00, 04.30, 09.30, 11.30, 13.15, 13.30, 15.05, 18.00, 19.30, 20.00, 20.30, 23.00, 24.00 – **Palestine Prgr:** 05.00–07.00, 14.00–15.00.

SOUDANESE PRGR:
04.00–06.00 on 710/11915kc, 13.00–16.28 on 872/9475/11915kc.
N. & Commentary: 06.15, 14.20, 14.45, 16.30.

SECOND PRGR. (Cultural): 19.00–22.15 on 872kc.

POPULAR CULTURAL PRGR: 14.00–23.30 on 710kc – **N:** 14.30, 17.15, 22.30.

ALEXANDRIA REG. PRGR: 15.00–22.00 on 1277kc – **N:** D 17.30, 19.30.

FOREIGN LANGUAGE PRGR (Local Service):
05.00–08.30, 08.30–10.30(Fri & Sun only), 10.30–22.30 on 557kc.
N, Comm: English: 05.30, 12.30, 18.00 – **French:** 06.00, 12.00, 19.00 – **German:** 05.45 – **Greek:** 05.00, 13.00 – **Italian:** 16.20.

KORAAN PRGR: 04.00–09.00 & 12.00–21.00 on 602/9750kc.

MIDDLE EAST COMM. PRGR: 05.00–06.00 on 773kc, 15.00–21.00 on 818kc – **N, Comm:** 05.30, 16.00, 17.00, 18.00, 20.00.

FOREIGN SERVICE
To So. & So.Ea. Asia: 10.30–15.30 on 17920kc (Arabic 10.30, Bengali 12.30, **English** 13.30, Urdu 14.30), 11.00–14.30 on 17690kc (Malayan 11.00, Thai 11.45, Indonesian 12.30, Pushtu 13.30).
To Ea. & C. Africa: 14.45–17.00, 17.45–19.45 on 17785kc (Amharic 14.45, Swahili 15.30, Lingala 17.45, Sosotho 18.30, Portuguese 19.00), 16.00–18.30 on 17920kc (Nianga 16.00, Somali 16.45, **English** 17.45).
To W. Africa: 18.45–21.45 on 15210kc (**French** 18.45, Folani 19.45, **English** 20.45), 20.15–21.45 (Hausa) on 17690kc.
To Mid. East: 16.30–18.30 on 9475/11915kc (Kurdish 16.30, Turkish 17.30), 17.00–19.30 (Persian) on 11980kc.
To Europe: 18.30–23.30 on 9475/11915kc (Italian 18.30, French 19.30, German 20.30, **English** 21.30, Arabic 22.30).
To No. & So. America: 00.00–02.45 on 9595/9780kc (Portuguese 00.00, Spanish 00.45, Arabic 01.30).
Hebrew Prgr: 04.00–05.00, 14.00–17.00 on 557kc.

Dictation Speed News: 06.00–06.30 on 7075/11915kc Arabic, 06.30–07.00 on 7075/11915kc English, 13.30–15.50 on 7075/9495kc Arabic.
INT-SIG: Camel Bells – **V. Re.** wanted. They are answered by QSL, card. Reports should be adressed to Propagation & Monitoring Dept-U.A.R. Broadcasting and TV, Maspero, Cairo – **PUB:** Prgr-schedules twice per year. Weekly and quarterly magazines in Arabic.

ETHIOPIA

L.T: GMT+3 h – **Pr.L:** Amharic, Arabic, English, Somali.

RADIO ADDIS ABABA (Go.)
FI: By Go – **AD:** After N in all languages – **ADDR:** R. Division, Ministry of Information, P.O. Box 1364, Addis Ababa. **Cable:** Ethiopress. **Te:** 12356 – **L.P:** Minister: B. G. T. Hawariat. Asst. Minister: J. Tesfazgi. Dir. Gen: Z. Reta. Gen. Mgr: H. Ruud. Dir. Tec: T. Y. Dafla.
STATIONS: Addis Ababa.

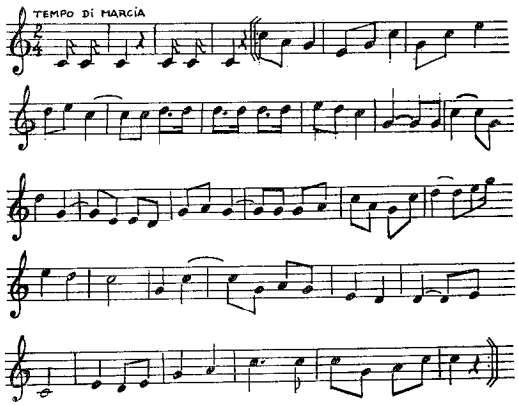
kc	m	kW	kc	m	kW	kc	m	kW	kc	m	kW
870	345.0	1	6185	48.50	10	9610	31.22	10	15300	19.60	10
5056	50.33	10	7290	41.15	10	11760	25.51	10	17775	16.88	10

HOME SCE: Amharic: 04.30–05.00(W) on 870/6185kc; 05.00–05.30(W) on 870/6185/7290kc; 05.30–06.00 on 870/5056/6185/7290kc; 07.00–08.00(Sun) on 870/6185kc; 11.00–12.00(Sat 13.00, Sun 13.30) on 870/7290/9610kc; 17.00–18.00 on 870/6185/7290kc; 18.00–19.00 on 870/6185kc; 19.00–20.00(Foreign Music) on 870/6185/7290kc – **Somali:** 04.00–04.30(W) on 870/6185kc; 06.00–07.00 on 870/5056/6185/7290kc; 10.00–10.15(W) on 870/7290/9610kc; 16.30–17.00 on 870/7290kc – **Arabic:** 16.00–16.15 on 870/6185/7290kc – **Swahili:** 04.30–05.00(W), 16.45–17.00 on 7290kc – **English:** 10.15(Sun 10.00)–11.00 on 870/7290/9610kc; 16.15–16.30 on 870/6185/7290kc. **N:** 10.15, 16.15.

INTERNATIONAL SCE: Arabic: To M. East: 15.10–15.50 on 17775 kc. **N:** 15.10 – **English:** To Europe: 18.10–18.30 on 11760kc. **N:** 18.25. To We. Africa: 20.10–20.30 on 15300kc. **N:** 20.25 – **French:** To Europe: 18.30–18.50 on 11760kc. **N:** 18.45. To We. Africa: 20.30–20.50 on 15300kc. **N:** 20.45.

ANN: E: "This is the Internal (or External) Service of R. Addis Ababa, the Voice of Ethiopia" – **F:** "Ici R. Addis Ababa la Voix de l'Ethiopie" – **Amharic:** "Yih ye Ethiopia Radio New" – **Somali:** "Halkani wa Addis Ababa Radio Ethiopia" – **Arabic:** "Huna Addis Ababa saut

Ethiopia" – Swahili: "Hii ni idhaa ya kiswahili ya Radio Addis Ababa sauti ya Ethiopia" – INT-SIG:



V. by QSL-card. Re. in E, F or Amharic – F.PL: 100kW mw- and sw-tr. at Addis Ababa; 50kW mw-tr's at Asmara 100kW mw-tr. at Harrar; Addis-Ababa FM (1kW) – PUB: Radio Journal (quarterly).

RADIO VOICE OF THE GOSPEL – LUTHERAN WORLD FEDERATION BROADCASTING SERVICE (Educ, Rlg)

FI: By free will offerings by church – ADDR: P.O. Box 654, Addis Ababa. Cable: Lutherworld. Te: PBX 47190.
L.P: Dir. Gen: Dr. Sigurd Aske. Dir. Prgr: U. Fick. Dir. Tec: E. Kraemer. Adm: T. Månson. Chmn. of the Board: Dr. Clark Fry.

STATIONS: "Radio Voice of the Gospel", ETLF; 2 tr's each 100kW.

4905kc	61.15m	9755kc	30.75m	11940kc	25.12m
6050 –	49.59 –	9765 –	30.72 –	15265 –	19.66 –
7120 –	42.13 –	11755 –	25.52 –	15355 –	19.52 –
7145 –	41.99 –	11875 –	25.26 –	15410 –	19.47 –
9705 –	30.91 –				

Schedule: 1/11/64–28/2/65 (alternative freq's in brackets).

Times	kc	Areas	Languages
13.00–14.30	9705 (9765)	India	Telugu, English
13.00–15.00	15410 (15355)	India/Ceylon	English, Tamil, Sinhalese
14.30–16.30	9705 (9765)	Ea.Arab countries	Arabic
15.00–15.45	9755 (11875)	Madagascar	Malagasy
15.45–17.00	6050 (4905)	Ethiopia	Amharic, English
16.30–18.00	9765 (9705)	Ea.Africa/Malawi	Swahili, Nyanja
17.00–18.30	7120 (7145)	We.Arab countries	Arabic
18.00–19.30	9705 (9765)	So. Africa	English, Zulu, Setho, Afrikaans
18.30–19.30	11755 (15265)	We.Africa	English

NEWS: English: 13.15, 14.30, 15.45, 17.00, 19.00. Arabic: 14.30, 15.20, 17.00, 17.50. Amharic: 16.00.

Medium Wave Sce (for Addis Ababa): 16.15–20.00 on 995kc 1kW. N: English: 17.30, 19.00. Amharic: 16.15, 18.30.

ANN: "This is R. Voice of the Gospel, ETLF, Addis Ababa, Ethiopia" INT-SIG: First four notes of "A Mighty Fortress" (three high and one low) on drums – V. by QSL-card. Records accepted – PUB: Newsletter (4 times a year).
Brown Boveri, Switzerland: 2 × 100kW sw-tr's.
Wilh. Franz KG, Germany: FMT studio equip to "R Addis Ababa.

GABON (Republic)

L.T: GMT + 1 h – Pr.L: French.

RADIODIFFUSION TELEVISION GABONAISE (Go.)

FI: By Go. – ADDR: B.P. 150, Libreville. Cable: Radio-Gabon. Te: 2952 – L.P: Dir. Gen: G. Rawiri. Dir. Tec: M. Bitran. Dir. Prgr's: M. Folly.
STATIONS (System TRT):

1313 kc	228.5 m	1 kW	–	4777 kc	62.80 m	30 kW		
1520 kc	197.3 m	1 kW	–	7270 kc	41.27 m	4 kW		

HOME SERVICE in French: Nat. Net: W 05.00–06.30 on 1520/4777 kc, 10.30–13.30 on 1520/4777/7270kc, 17.30–21.30 (Sat 16.00–23.00) on 1520/4777kc. Sun 07.00–17.00 on 1520/4777/7270kc, 17.00–23.00 on 1520/4777kc – N: 05.45(W), 12.00, 13.25(W), 19.00, 19.35(W), 20.55(W) – L.L (English): Tues 17.45, Fri 17.50.
Reg. Netw: D 19.00–21.00 on 1313kc – ANN: "Radiodiff. Télévision Gabonaise émettant de Libreville et de Moanda" – V. by letter – F.PL: Reg. st's at Oyem, Port-Gentil – PUB: Prgr.schedule (weekly).

R. MOANDA-FRANCEVILLE (Go.)

ADDR: B.P. 150, Libreville – STATION: 6030kc 49.75m 4kW. Rel. of R. Nationale Gabonaise.

GAMBIA (British)

L.T: GMT – Pr.L: English, Mandinka, Wolloff, Fula, Serahuli, Jola Serere.

RADIO GAMBIA (Go.)

ADDR: Bathurst – L.P: Broadc. Adviser: A.P. Cox (on secondment from BBC). Broadc. Officer: A.M. Lowe. Dir. Tec: P.J. Warren.
STATION: 4820kc 62.24m 3.1kW
HOME SCE in English, Woloff, Mandinka principally:
Mon–Fri 17.55–20.00. N: 18.00(BBC) – V. by letter.

GHANA

L.T: GMT – Pr.L: Akan, Ewe, Dagbani, Ga, Hausa, Nzema.

GHANA RADIO AND TELEVISION CORPORATION (Go.)

FI: By appropriation and subscriptions from wired broadc. – ADDR: Broadc. House, P.O. Box 1633, Accra. Cable: Broadcasts. Te: 77551 – L.P: Dir. of Broadc: W. F. Coleman, B.Sc., M.I.E.E, M.B.E. Eng-in-Chief: J. K. Asare, B.Sc, A.M.I.E.E. Head of Nat. Sce: J. Ghartey. Head of External Sce: J. Asmah, B.A.

STATIONS:

kc	m	kW	kc	m	kW	kc	m	kW	kc	m	kW
3366	89.12	20	7295	41.12	10	11800	25.42	100	17910	16.75	100
4915	61.04	5	9545	31.43	100	15190	19.75	100	21545	13.92	100
6070	49.42	100	9640	31.12	10						

HOME SCE: W: 05.30–08.00 on 3366/4915kc, 12.00–16.00 on 4915/7295/9640kc, 16.00–16.30 on 4915/7295kc, 16.30–18.15 on 3366/4915/7295kc, 18.15–22.20 (Sat 23.05) on 3366/4915kc. Sun 05.30–07.15 on 3366/4915kc, 07.15–08.00 on 3366/4915/7295kc, 08.00–12.00 on 4915/7295kc, 12.00–16.00 on 4915/7295/9640kc, 16.00–16.30 on 4915/7295 kc, 16.30–18.15 on 3366/4915/7295kc, 18.15–22.20 on 3366/4915kc. N: English: 06.00, 07.00, 13.00, 18.00, 20.00 (African), 21.00, 22.00 – Ghana Languages: 06.30, 16.30 – L.L: English: Mon–Fri: 06.25, 19.55. French: Mon–Fri: 06.15, 20.15.

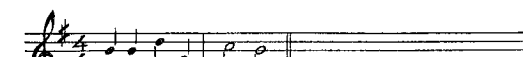
FOREIGN SERVICE: 4 tr's 100kW each.
Areas: I=Sudan, Ethiopia, Somali; II=Angola, Mozambique; III=Ea. Africa; IV=So, SoWe, SoEa. Africa; V=We. Africa; VI=U.A.R, Sudan, Libya; VII=Port. Guinea; VIII=Congo, C. Africa, Madagascar; IX=Ea. Africa & NoEa. Congo; X=U.K, Europe; XI=Morocco, Algeria, Tunisia.

Arabic	kc	Area
15.45–16.30	21545	VI
20.05–20.50	11800	XI
English		
14.00–14.45	15190	I
14.45–15.30	17910	III
14.45–15.30	21545	IV
14.45–15.30	6070	V
16.30–17.15	17910	IV
17.00–17.45	6070	V
18.30–19.15	11800	I
20.00–20.45	9545	IV
20.00–20.45	6070	V
20.50–21.35	11800	X
21.30–22.15	6070/9545	V

French	kc	Area
17.45–18.30	11800	VIII
17.45–18.30	6070	V
19.15–20.00	11800	VIII
19.15–20.00	6070/9545	V
20.45–21.30	6070/9545	V
Hausa		
15.45–16.30	6070	V
18.30–19.15	6070/9545	V
Portuguese		
14.00–14.45	21545	II
16.45–17.30	21545	II
16.45–17.30	11800	II+VII
Swahili		
14.00–14.45	17910	III
15.45–16.30	17910	III
17.15–18.00	17910	III

N. in English: 14.00, 14.45, 17.00, 18.30, 20.00, 20.50, 21.30 – Here in Ghana: Tues, Thurs: 15.20, Thurs: 22.05, Sun: 17.35, 19.05 – For Freedom Fighters: Sun: 14.35, 15.20, 22.05, Mon: 21.25, Wed: 14.35, 15.20 – N. in French: 17.45, 19.15, 20.45 – N. in Portuguese: 14.00, 16.45 – N. in Arabic: 15.45, 20.05.

ANN: "This is the Nat. Sce. of the Ghana Broadc. Corpo." preceded by drumming or "This is R. Ghana" – INT-SIG: Guitar: First few bars of Ghana National Anthem



V. by QSL-card and letter. Re. on technical matters to Propagation Eng, on prgr's to Head of External Sce. Records accepted – PUB: "Radio Review & TV Times" (weekly), External Service schedule (monthly) – F.PL: Ejura – two 250kW sw-tr's for External Sce, six 10kW sw-tr's for Nat. Sce. to be in operation early 1965.

The Marconi Company Ltd, G.B: Four 100kW tr's (Tema); one 20kW, two 10kW tr's (Accra).

GUINEA (Rep.)

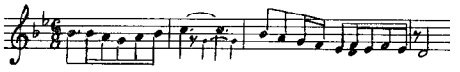
L.T: GMT – Pr.L: French, Vernaculars.
RADIODIFFUSION NATIONALE (Go.)
ADDR: B.P. 617, Conakry. Cable: Radio Guinée. Te: 3366.
STATIONS:

kc	m	kW	kc	m	kW	kc	m	kW	kc	m	kW
1403	213.8	4	3385	88.63	50	6155	48.74	18	9650	31.09	50
3376*	88.89	50	4910*	61.10	18	7125*	42.11	18	11965*	25.07	50

* not in use during rain season (June–October).

HOME SCE. in French, National languages. English, Creole-English, Arabic, Portuguese, Creole-Portuguese, Ouolof, Bambara, Mandjake: W 06.00–08.00, 12.30–13.30, 16.00–24.00, Sun 08.00–14.00, 16.00–24.00. On 1403/4910kc: as above. On 3385kc: 16.00–24.00. On 6155kc: W 12.30–13.30, Sun 08.00–14.00. On 9650kc: W 06.00–08.00, D 16.00–24.00.
N: French: 07.00(W), 09.15(Sun), 12.45, 17.00(W), 20.00, 23.30(Mon–Fri). English: D 20.30–20.40. Creole-English: Sat 16.20.

ANN: F: "Ici la Voix de la Revolution (before news)" or "Ici Conakry, Radiodiff. Nationale" or "Ici Conakry Radiodiff. de la Republique de Guinee". E: "Here is the Voice of the Revolution".
INT-SIG: First movement of the popular heroic song "Alpha Yaya" (first movement of Guinean National Anthem) on Guitar:



V. by letter.

GUINEA (Portuguese)

L.T: GMT – 1 h – Pr.L: Portuguese.
EMISSORA PROVINCIAL DA GUINE (Go.)
AD: 15 min. a day – Fee: 100$00 – ADDR: Av. da Republica, Bissau – L.P: Pres: Eng: A. Henrique Salcado. Dir. Prgr: L. de Sousa Santos.
STATION: 1050kc 1kW – 5041kc 59.50m 10kW.
HOME SCE: 12.00(Sun 09.00)–14.00, 18.00–23.00.
ANN: "Fala Portugal através da Emissora provincial da Guiné Portuguesa, a transmitir em ondas medias, no comprimento de 285m, freq. de 1050kc, e em ondas curtas, em 60m, freq. de 5041kc" – INT-SIG: Guitar. V. by QSL-card or letter, Records accepted.
Continental Electronics USA: 1kW, 10kW sw-tr's.

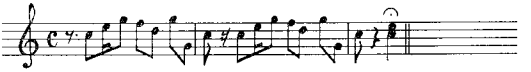
GUINEA (Spanish)

L.T: GMT+1 h – Pr.L: Spanish.
EMISORA DE RADIODIFUSION SANTA ISABEL (Go.)
ADDR: Apt. 195, Santa Isabel, Fernando Poo.
L.P: Dir: M. Barbera.
STATIONS: 6240kc 48.08m 5kW – 6345kc 47.28m 1.6kW – 7160kc 41.90m 0.5kW.
HOME SCE: N: Spanish: 07.00(W), 13.00(Sun), 13.20(W), 20.30(W).
ANN: "Aqui Emisora de Radiodifusion de Santa Isabel de Fernando Poo". INT-SIG: "Los Voluntarios". Close down: Spanish National Anthem V. by letter.

RADIO ECUATORIAL (Go, Comm.)
ADDR: Apt. 57, Bata, Provincia de Rio Muni. Cable: Radio Bata. Te: 182 – L.P: Dir: F. de Anta Franco.
STATION: EAJ206 4926kc 60.90m 5kW.
HOME SCE. in Spanish: W 10.00–14.00, 17.30–22.00(Sat 24.00), Sun 10.00–17.30, 18.00–22.00. N: 12.05, 13.00, 21.00, 22.00. News in Fang (dialect): 19.45 – ANN: "Transmite R. Ecuatorial Bata, La Voz de Rio Muni" – INT-SIG: Gong – V. by QSL-card and flag.

IVORY COAST (Republic)

L.T: GMT – Pr.L: French, Vernaculars.
RADIODIFFUSION TELEVISION IVORIENNE (Go.)
FI: By Go – AD: 1% of all prgr's.
ADDR: B.P. 2261, Abidjan. Cable: Radiocotivoire. Te: 23514.
L.P: Dir: E. Kouame. Dir. Tec: L. Diallo.
STATIONS: National Netw: 1240kc 242m 1kW
3232kc 92.82m 10kW – 4940kc 60.73m 25kW
International Netw: 1493kc 201m 4kW
7215kc 41.58m 25kW – 11820kc 25.38m 100kW
D.PRGRS: National Netw: W 06.00–07.30, 12.15–13.30, 17.30–22.30 (Sat 12.15–23.00), Sun 07.00–22.30 on 1240/3232/4940kc.
N. in French: 06.45(W), 12.45, 19.00, 22.25 – Vernaculars (Baoulé, Ebrié, Attié, Dioula, Sénoufo, Mossi, Dida, Gouro, Bété): W 17.45–18.45.
International Netw: W 06.30–08.00, 12.15–13.30, 18.00–24.00, Sun 06.30–08.00, 12.15–24.00 on 1493/7215/11820kc – N. in French: 07.00, 12.45, 20.00, 22.55. English: W 18.30–19.00.
ANN: "Ici Abidjan, Radiodiff. Television Ivorienne, chaine nationale... or chaine internationale" – INT-SIG: Vibraphone



V. by QSL-card. Rp. appreciated.

KENYA

L.T: GMT+3 h – Pr.L: English, Swahili, Hindustani.
VOICE OF KENYA (Go.)
FI: By license payments, adv. and Go. subvention – ADDR: Box 30456 Nairobi. Cable: Broadcasts. Te: 27081.
L.P: Dir: G. M. Cahan. Dep. Dir: R. Koske. Dir. Tec: R. J. Davey. Dir. Prgr's: J. Ilhau. Pub. Rel. Officer: A. Yakub.
HOME SERVICES
General Sce. (English) from Nairobi: W 03.15–06.25, 09.15–11.15, 13.00–20.01, Sat 03.15–21.00, Sun 04.00–20.00.
863 kc 347.5 m 10 kW: FM: 95.1Mc 1kW: As above.
4885 – 61.41 – 10 – : W 03.05–06.25, 13.00–20.01, Sat 03.15–06.15, 12.15–21.00. Sun 04.00–06.15, 12.45–20.01.
7240 – 41.44 – 10 – : W 09.15–11.15, Sat 06.30–12.00, Sun 06.30–12.30.
N: 04.00, 06.00, 10.15, 11.00, 16.10 (Sat 16.00, Sun 17.00), 18.00, 18.10(W).
Nat. Sce. (Swahili) from Nairobi: W 03.00–05.00, 10.00–11.00, 14.30–20.00, Sat 03.00–20.00, Sun 04.00–20.00.
750 kc 400 m 10 kW and FM: 92.9Mc 1kW: As above.
4934 – 60.80 – 10 – : W 03.00–05.00 (Sun 04.00–06.00), 14.30–20.00.
7210 – 41.61 – 10 – : W 10.00–11.00 (Sat 14.15), Sun 06.15–14.15.
Hindustani Sce. (Nairobi): W 03.15–05.00, 09.30–11.00, 14.30–20.00, Sat 03.15–05.00, 09.30–20.00, Sun 05.00–19.30.
683 kc 439.2 m 5 kW: As above.
4855 – 61.79 – 5 – : W 03.15–05.00, 14.30(Sat 13.15)–20.00, Sun 13.15–19.30.
7125 – 42.11 – 5 – : W 09.30–11.00 (Sat 13.00), Sun 05.00–13.00.
N. in English: D 16.00, 18.00.
Nairobi Reg. Station: D 09.15–10.30, 13.15–19.30.
1268 kc 236.6 m 5 kW: As above 4950 – 60.66 – 5 – : D 13.119.30.
7150 – 41.96 – 5 – : D 09.15–10.30.
Mombasa Station: 791kc 20kW. W 03.30–04.45, 10.00–11.00, 14.00 (Sat 13.30)–20.30, Sun 06.15–11.00, 14.00–20.30.
Kisumu Station:
W 03.30–04.45, 10.00–11.00, 13.30–19.30, Sun 10.00–19.30.
953 kc 314.6 m 5 kW: As above.
4804 – 62.44 – 5 – : W 03.30–04.45, 13.30–19.30. Sun 13.15–19.30.
7290 – 41.15 – 5 – : W 10.00–11.00, Sun 10.00–13.00.
ANN: All tr's are regularly identified by the words "Voice of Kenya" preceded by the appropriated nat. or reg. service identity. – INT-SIG: Sound of African birds – V. by letter. Re. to Chief Engineer. Records accepted.

AKG, Austria, delivered equipment (recorders, microphones).
The Marconi Company Ltd, GB, delivered 2×2kW and 4×10kW tr's (Nairobi), antennas, studio equipment.

LIBERIA (Rep. of)

L.T: GMT–¾ h – Pr.L: English, Liberian-Vernaculars.
LIBERIAN BROADCASTING CORPORATION (Go.)
Man. Agents: Overseas Rediffusion Ltd., London, England.
FI: By adv – ADDR: P.O. Box 594. Monrovia. Cable: Broadcasts. Te: 649 – L.P: Gen. Mgr: H. Chambers. Chief Eng: W. MacDonald.
STATIONS: 650kc 461.5m 10kW – 3255kc 92.15m 10kW
6090kc 49.26m 10kW.
HOME SCE: 06.15–08.45, 17.45–00.50 on 650/3255kc, 08.45–17.45 on 650/6090kc – N. English: 08.00, 09.15, 13.00, 16.00, 18.00, 21.45, 23.45. N. in African dialects: 18.10. African N. in English: 20.10.
ANN: "This is st. ELBC Monrovia" or "This is the Liberian Broadc. Corpo, Monrovia" – V. by QSL-card

RADIO STATION ELWA (Non-comm, Cultural Missionary Broadc. Sce. of the Sudan Interior Mission).
FI: Entirely by voluntary gifts of Christian people – ADDR: Box 192, Monrovia. Cable: Evangel – L.P: Gen. Mgr: Rev. D. Reed. St. Mgr: Rev. W.H. Thompson. Dir. Prgr: J. Pelley. Dir. Tec: H. Ries. Dir. French Dept: M. Weber.

STATIONS (System: Gates):

kc	m	kW	kc	m	kW	kc	m	kW
710	422.0	1	4770	62.89	10	15155	19.80	50
3225	93.05	10	11975	25.05	10/50	21535	13.93	1

HOME SCE (for Liberia/We Africa):
English: W: 06.12–09.30, 12.42–21.00 on 710/4770kc; 21.00–22.50 on 710kc; 09.00–09.05, 22.15–22.45 on 3225kc. N. 07.00(BBC), 04.00 (3225kc), 09.15(BBC), 13.00, 16.00(BBC), 17.00, 18.00(BBC), 20.00 (BBC), 20.45, 21.45 (710kc), 22.30 (3225kc) – Sun: 08.15–23.15 on 710kc; 08.15–17.45, 19.45–20.45, 21.45–23.15 on 4770kc; 11.15–13.15 on 3225kc. **N:** 09.15, 13.00, 20.00.
Liberian Languages: W: 06.12–09.00, 18.02–22.15 on 3225kc; 08.45–09.15 on 710/4770kc – Sun: 06.12–10.45, 18.12–22.15 on 3225kc; 06.12–08.15 on 710/4770kc – **French:** 21.00–22.00(Sun.20.45–21.45) on 4770kc.

FOREIGN SCE:
To Ce. Africa on 11975kc: English: 06.00–07.45(Sun 08.00), 11.00 (Sun 10.00)–12.00, 16.30–18.30(Sun 19.30). **N:** (W): 06.00(BBC), 07.00(BBC), 11.00(BBC), 17.00 – **French:** 05.00–06.00, 08.00–10.00 (Sun only), 12.00–13.30 – **Nigerian Languages:** 07.45–08.00(W only), 13.45–16.30. **Twi:** 08.00–08.15(Mon, Thurs only).
To Congo on 15155/21535kc: English: 15.45–16.15(Sun 14.30–15.30) – **French:** 17.00–18.00 – **Congo Languages:** 16.15(Sun 15.30)–17.00.
To Near East on 15155/21535kc: English: 19.00–19.30(Tues, Wed, Fr, 19.15) – **Greek:** 19.15–19.30(Tues, Wed, Fri only) – **Arabic:** 18.30(Sat/Sun 18.01)–19.00 – **Amharic:** 18.01–18.30(Mon–Fri).
To No. Africa on 15155/21535kc: English: 21.15–21.45(Sun 21.30–22.00) – **French:** 19.35–20.15(Sun 20.30) – **Spanish:** 20.15–20.30 (Mon Tues, Wed, Sat) – **Italian:** 20.15–20.30(Thurs, Fri) – **Arabic:** 20.30, 21.15(Sun 21.30).
To So. America on 15155/21535kc: Portuguese: 22.00–22.45.
L.L. (English to French): Mon 21.30 on 4770; Tues, Wed 17.30 on 15155kc; Thurs 05.45 on 11975kc.

ANN: Home- & Foreign Sce: "This is ELWA R. Village broadc. from Monrovia, Liberia". French: "Ici ELWA R. Village, Monrovia, Liberia" – **INT-SIG:** Sign on music for all freq's: Orchestral version of hymn "What a Friend We Have in Jesus" – V. by QSL-card. Rp. appreciated. Re. in E. or F. Records accepted – **PUB:** R. News Bulletin quarterly.

VOICE OF AMERICA RADIO STATION IN LIBERIA

ADDR: Voice of America, Washington 25, D.C. USA.
Short Wave: Monrovia 50/250kW:

kc	m	kc	m	kc	m	kc	m
3965	75.67	7265	41.29	15315	19.59	17775	16.88
6035	49.71	9520	31.51	15365	19.52	17860	16.80
6075	49.38	11910	25.19	15445	19.43	17870	16.79
7195	41.70						

D.PRGR: English: 03.00–08.00, 14.00–21.30, 22.00–23.45. **French:** 17.00–17.30, 19.30–20.00, 21.30–22.00. **Swahili:** 15.30–16.00, 18.30–19.00. **Arabic:** 17.30–18.00, 19.00–19.30 – **ANN:** "You are listening to the Voice of America from Monrovia".

LIBYA (Kingdom of)

L.T: GMT+2 h – **Pr.L:** Arabic.

LIBYAN BROADCASTING SERVICE (Go.)

FI: By Ministry of Information and Guidance – **ADDR:** P.O. Box 333, Tripoli; P.O. Box 274, Benghazi, Cable: Idaalibya. **Te:** 1090 (Tripoli), 3000 (Benghazi) – **L.P:** Under Secr, Ministry of Inf. and Guidance: A. Hamouda Seialah. Dir. of Broadc: M.R. Ben Shaban. Prgr. Consultant: O. Ali, Tech. Supervisor: M. Arcbi.

STATIONS:	kc	m	kW		kc	m	kW
Tripoli	1052	285.1	50	Benghazi	3305	90.77	7.5
Benghazi	1484	222.2	10	Tripoli	6140	48.86	1

HOME SCE. in Arabic: 04.45–07.00, 12.00–22.15 (Fri 04.45–22.15). **N:** 05.30, 06.55, 13.00, 15.30, 17.30, 18.15, 19.30, 21.00, 21.55.
ANN: "Hunna Al Idaa Allibia Min Tarablus" (from Tripoli) or "Hunna Al Idaa Allibia Min Benghazi" (from Benghazi) – **INT-SIG:** Prgr's open and close with National Anthem – V. by QSL-card or letter – **F.PL:** Tripoli and Baida 100kW at the beginning of 1965; English, French and Italian prgr's.

BRITISH FORCES BROADCASTING SERVICE TRIPOLI

ADDR: B.F.P.O. 57, Libya. **Te:** Tripoli 2179.
L.P: St. Contr: R. L. Angove M.B.E, A.L.C.M. Prgr. Officer: D. Hale. Tech. Officer: L. Allen.
STATIONS: 1394kc 1kW – 93.1Mc 20kW.
D.PRGR'S in English: W 04.30–06.30, 10.30–21.00(Sat 22.00). Sun 05.00–21.00. **N.** (rel. BBC/G.O.S.) – **ANN:** "This is the British Forces Broadc. Sce. Tripoli" – V. by QSL-card. Rp.

BRITISH FORCES BROADCASTING SERVICE BENGHAZI

ADDR: B.F.P.O. 55, Benghazi – **L.P:** St. Contr: D. G. Philips. Techn. Officer: M. Farnes. Prgr. Organiser: R. Kennedy.
STATIONS: 833kc 360.5m 1kW – 97.8Mc 4kW (ERP).
D.PRGR. in English: W 04.30–06.15, 16.00–21.00 (Sat 10.30–22.00). Sun 06.00–21.00.
N. (rel. of BBC/GOS): 05.00(W), 06.00(W), 07.00(Sun), 11.00(Sat/Sun), 16.00, 18.00.
ANN: "This is the British Forces Broadc. Sce. Benghazi".
V. by QSL-card.

BRITISH FORCES BROADCASTING SERVICE TOBRUK

ADDR: B.F.P.O. 56, Tobruk – **L.P:** St. Contr: K. J. P. Doherty. Sen. Eng: P. E. Johnson. Prgr-Organiser: A. A. Hargreaves.
STATIONS: 1484kc 202.2m 1kW – 1439kc 208m 1kW – **FM:** 89.4Mc, 90.2Mc 0.075kW – **D.PRGR'S in English:** 14.30–20.15.
ANN: "This is the British Forces Broadc. Sce. Tobruk–" – V. by QSL-card.

ARMED FORCES RADIO SERVICE: see USA

MADEIRA ISLANDS (Portuguese)

L.T: GMT – 1 h (Su. GMT) – **Pr.L:** Portuguese.

RADIO EMISSORA DA MADEIRA (Pr.)

ADDR: Picodas Barcelos, Funchal. **Te:** 21883 – **L.P:** St. Dir: M. de Sousa Portela Ribeiro. Dir. Tec: M. Portela Ribeiro.
STATION (System: Gates): CBS90 1484kc 202m 1kW.
HOME SCE: 12.00–17.30, 19.30–23.30.
ANN: "Aqui, Estação R. da Madeira com o seu emissor CSB90 no comprimento d'onda de 202 metros freq. de 1484kc..." – **F.PL:** 10kW.

POSTO EMISSOR DE RADIODIFUSÃO DO FUNCHAL (Priv.)

ADDR: Rua Ponte de S. Lazaro 3, Funchal. **Te:** 1797 – **L.P:** Dir: Dr. W. E. Clode – **STATION:** CSB91 1594kc 188.2m 0.3kW.
HOME SCE: W 12.30(Tues, Fri 12.00)–17.00, 19.30–24.00, Sun 10.00–24.00 – V. by letter.

MALAGASY REPUBLIC

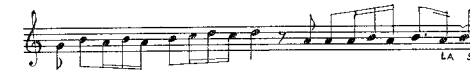
L.T: GMT+3 h – **Pr.L:** Malgache, French.

RADIODIFFUSION NATIONALE MALGACHE (Go.)

ADDR: B.P. 442. Tananarive. **Cable:** R. Madagascar. **Te:** 4745. **L.P:** Dir: R. Rabesahala. Techn. Counsellor: R. Leruste. Dir. Tec: B. Rakotoarivelo Dir. Nat. Net: I: Andriamamonjy. Dir. Nat. Net. II: J. Rafidinarivo.
STATIONS (Systems: TRT+CFTH):

kc	m	kW	Net.	kc	m	kW	Net.	kc	m	kW	Net
1394	215.12	1	I	3288	91.24	4	II	7155	41.92	4	I
1502	199.7	1	II	6135	48.90	4	I	7280	41.21	4	II
3232	98.82	4	I	6170	48.62	4	II				

HOME SCE: Nat. Net. I (Malgache): W 03.30–05.15, 08.00–10.30, 14.00–19.30, Sat 03.30–20.00, Sun 04.00–19.30. 1394kc as above; 3232kc: 03.30–05.30(Sun 04.00–05.15), 15.00(Sat/Sun 13.58)–19.30 (Sat 21.00); 7155kc: 08.00–11.00(Sat 08.00, Sun 05.30–13.58); 6135kc: as above.
N: W 03.40, 04.15, 09.30, 16.15, 18.30; Sun 05.15, 09.30, 18.30. **Nat. Net. II (French):** W 03.30–05.15, 09.00–11.00, 15.00–19.30. Sat 03.30–21.00. Sun 04.00–19.30. 1502/6170kc: as above. 3288kc: 03.00–05.15 (Sat 06.00), 13.58–19.30 (Sat 21.00); 7280kc: 08.00–11.00 (Sat/Sun 06.00–13.58).
N: Mon–Fri: 03.45, 04.45, 09.00, 09.30, 10.30, 15.13, 16.30, 19.15. Sat: 03.45, 04.45, 06.30, 08.00, 09.00, 10.30, 13.00, 15.00, 20.55. Sun 04.45, 06.35, 08.00, 16.30.
ANN: **Malgache:** "Antananarivo ity! antoko volohary". **F:** "Ici Tananarive – Radiodiff. Nationale Malgache". **INT-SIG:** "O... Raketaka" played on "Valiha" (typical Malgache instrument consisting of bamboo the detached fibres of which are used as strings).



V. by QSL-card. Records accepted. **F.PL:** Two 4kW mw-tr's, two 30kW sw-tr's, one 100kW sw-tr. directed to We. Africa, Europe – **PUB:** Prgr. schedule (quarterly).

RADIO UNIVERSITE (Go, Educational)

ADDR: Tananarive – **STATIONS:** 1466kc 0.3kW – 3374kc 88.90m 1kW. – **HOME SCE. in French:** Mon–Fri 15.00–19.30, Sat. 12.00–16.00.

MALAWI

L.T: GMT+2 h – **Pr.L:** English, Nyanja, Tumbuka.

MALAWI BROADCASTING CORPORATION

(Independent statutory body).
FI: By Go. subvention, license fees, revenue from comm. adv.

ADDR: P.O. Box 453, Blantyre. **Cable:** Radiomalawi. **Te:** 8461 – **L.P:** Chmn: D. R. Katengeza. Dir. Gen: Aleke K. Banda. Secr. & Head of Adm: Capt. F. Headland.
STATIONS: Blantyre/Limbe 773kc 10kW – 3955kc 75.84 m 10 kW – Lilongwe 602kc 1kW.
HOME SCE: D 04.00–06.00, 10.00–20.00 – N: English 05.00(W), 06.00(Sun), 11.00, 16.00, 18.00, 19.50. Nyanja 04.15, 16.30. Tumbuka 04.30, 16.45 – **ANN:** E: "This is the Malawi Broadc. Corporation calling from the Blantyre studios. We are broadc. on 76m in the sw band and 244m in the mw band". Nyanja: "Kumo ndi ku Malawi Broadc. Corpo". Tumbuka: "Kuno nkhu Malawi Broadc. Corpo" – **INT-SIG:** African drums and crowing cock – V. by letter.

MALI (Republic of)

L.T: GMT – **Pr.L:** French, English, Vernaculars.

RADIO MALI (Go.)

ADDR: B.P. 171, Bamako. **Cable:** Radio Mali. **Te:** 2474 – **L.P:** Dir: M. Racine Kane. Dir. Tec: M. Keita.
STATIONS:

1268 kc	236.6 m	4 kW	7280 kc	41.21 m	18 kW
1430 –	210.0 –	60 –	9745 –	30.78 –	50 –
4783 –	62.72 –	18 –	*11750 –	25.53 –	50 –
4835 –	62.05 –	18 –	**11815 –	25.39 –	50 –
7145 –	41.99 –	18 –			

* from Nov. 1st; ** until Oct. 31st.
HOME SCE. in French, English, Bambara, Souraie, Peul, Sarakolé, Ouloff, Tamachek, Maure: W: 06.00–08.00 on 1268/1430/4783/4835/9745kc, 12.00–14.00(Sat 17.30) on 1268/1430/7145/7280/9745kc, 18.00(Sat 18.30)–23.00 on 1268/1430/4783/4835/9745kc. Sun: 08.00–17.30 on 1268/1430/7145/7280/9745kc, 18.30–23.00 on 1268/1430/4783/4835/9745kc – N: **French:** 07.00(W), 09.00(Sun), 12.45, 20.15, 22.30. **English:** 13.00, 20.45. **Vernaculars:** D: 12.30, 13.15, W: 18.45, 19.00, 19.15, 19.25, 19.35.
Special Prgr. on 11750kc: Mon 10.30–11.15.
ANN: F: "Ici Bamako, Radiodiff. Nationale de la République du Mali émettant sur..." – **INT-SIG:** African Music on local instrument "Cora" – V. by QSL-card. Records accepted. Rp.

MAURITANIA (Republic)

L.T: GMT – **Pr.L:** French, Arabic, Maure, Saracolé, Toucouleur, Ouloff.

RADIO MAURITANIA (Go.)

AD: D. 2×30 seconds, at 07.00, 20.00.
ADDR: B.P. 200, Nouakchott. **Te:** 2164 – **L.P:** Dir: D. Fall.
STATIONS:

kc	m	kW	kc	m	kW	kc	m	kW
1349	222.4	1	4855	61.79	4	7245	41.41	4
3222	93.11	30	6035	49.71	30	9610	31.22	30

HOME SCE: W 06.30–08.00 on 1349/3222kc, 12.00–15.00 on 1349/6035/9610kc, 18.00–22.30(Sat 23.00) on 1349/3222kc. Sun 07.30–10.00 on 1349/3222kc, 10.00–18.00 on 1349/6035/9610kc, 18.00–23.00 on 1349/3222kc – N: **French:** 07.15(W), 10.00(Sun), 12.45, 20.00, 22.25. **Arabic:** 07.10(W), 07.35(Sun), 13.00, 20.30, 22.15. **Ouloff:** 12.00, 18.00. **Toucouleur:** 12.30, 18.30. **Sarakolé:** 12.15, 19.00.
ANN: F: "Ici Nouakchott, Radiodiff. de la République Islamique de Mauritanie" – **INT-SIG:** Mauritanian guitar – V. by QSL-card. Re. in F, Arabic – **F.PL:** 100kW tr. at Nouakchott 1965, 100kW mw-tr. at Port Etienne within 3 years; three 10kW mw-tr's for relay of Nouakchott to cover the whole country.

MAURITIUS (British)

L.T: GMT+4 h – **Pr.L:** English, French, Hindustani, Chinese.

MAURITIUS BROADCASTING CORPORATION (Comm.)

ADDR: Malherbes Transmitter Bldg, Forest Side. **Te:** Curepipe 507. **Cable:** Broadcast – **L.P:** Dir. Gen: St. McCormack. Chief Eng: G. Gaughan. Prgr. Contr: D. V. G. Gardner. Sales Contr: St. G. Littlepage.
STATIONS (10kW): 683kc 439m – 4850kc 61.86m – 9710kc 30.90m
HOME AND DEPENDENCIES: D 02.30–18.30.
683kc as above; 4850kc: 12.00–18.30; 9710kc: 02.30–12.00.
English/French: W: 03.00–10.00, 14.30–18.30. Sun: 03.00–09.00, 14.30–18.30. N: **French:** 03.30, 06.00, 08.30, 15.00, 16.00, 17.30. **English:** 04.00, 18.00. **Wrp:** 03.40, 15.10 (F), 04.10 (E). **Indian Languages:** W: 02.30–03.00, 10.30–14.30. Sun: 10.00–14.30. N: 02.45, 14.15. **Chinese:** Sun: 09.00–10.30, Tues–Thurs: 09.30–10.30. **Mbg** (for Mauritians Overseas): Sun 06.03.
ANN: E: "This is the Mauritius Broadc. Corpo." F: "Ici le M.B.S. poste de radiodiff. de l'Ile Maurice" – **INT-SIG:** Opening tune: "Brucker lagger march". Before N: "Cortége de Bacchus" from Sylvia Ballet by Delibes – V. by letter. Records accepted.

The Marconi Company Ltd, G.B: delivered 10kW tr. ant, studio equip.

MOROCCO (Kingdom of)

L.T: GMT – **Pr.L:** Arabic, French, Spanish, English, Berber.

RADIODIFFUSION TELEVISION MAROCAINE (Go.)

ADDR: I Rue Pierre Parent, Rabat. **Cable:** Radiomaroc. **Te:** 201.51. **Telex:** 31010 – **L.P:** Dir. Gen: M. Ben Souda. Chief Eng: M. Drissi.
HOME SCE: First Netw. (Chaine A):
Arabic: W exc. Fri 06.30–09.00, 12.00–24.00. Fri Sun 06.30–02.00.

	kc	m	kW		kc	m	kW
Oujda	593	506	100	Marrakech I	971	309	1
Sebaa Aioun I	611	491	140	Safi I	1025	293	1
Casablanca	818	367	1	Tetuan I	1052	293	20
Rabat I	827	363	1	Tanger II	1115	269	1
Agadir	935	321	100				

Short Waves: * Sebaa Aioun; ** Tangier.

kc	m	kW	Beam	H of transmission
*7225	41.52	10	So. Morocco	as above
**9615	31.20	100	Mid. East	19.00–22.00
**11735	25.56	50	We. Af/Mauritania	12.00–15.00
*15345	19.55	50	We. Af/Mauritania	06.30–09.00, 12.00–18.00(Fri, Sun 06.30–18.00)

FM: Rabat 92.1Mc 0.35kW, Sebaa-Aioun 96.8Mc, 1kW, Casablanca 96Mc 0.25kW.
Second Netw. (Chaine B):
French, Spanish: W 07.00–09.00, 12.00–15.00, 18.00–24.00, Sun 07.30–02.00.

	kc	m	kW		kc	m	kW
Sebaa-Aioun II	701	428	140	Marrakech	1151	261	1
Oujda II	827	263	1	Casablanca II	1187	253	1
Tanger III	1016	295	1	Safi II	1322	227	1
Rabat II	1025	293	1				

Short Wave: Sebaa-Aioun 7115kc 42,16m 10kW to So. Morocco: times as above.
FM: Rabat 87.9Mc 0.25kW – Casablanca 92.1Mc 0.25kW – Sebaa-Aioun 93.6Mc 0.25kW.
French: W 07.00–08.30, 12.00–14.00, 18.00–23.00. Sun 07.30–10.00, 11.00–14.00, 15.00–23.00 – N: 07.45, 13.00, 20.00, 22.45. **Spanish:** 08.30–09.00(Sun 10.00–11.00), 14.00–15.00, 23.00–24.00 – N: 08.30, 14.15, 23.00.
Third Netw. (Chaine C):
Berber: 07.00–09.00, 12.00–15.00, 17.00–23.00.

	kc	m	kW		kc	m	kW
Tetuan II	917	327	5	Casablanca III	1484	202	1
Sebaa-Aioun III	1043	288	25	Marrakech	1594	188	1
Rabat III	1295	232	1				

"Voice of Morocco": 1232kc 243.5m 50kW: 09.30–18.00, 22.00–24.00 in **Arabic, French, Spanish:**
Arabic: 09.30–14.00, 22.00–24.00 – **Spanish:** 14.00–16.00 – **French:** 16.00–18.00.
FOREIGN SERVICE: French, English, Ouolof: 18.30–23.30.
Sebaa-Aioun 6190kc 48.47m 50kW: to We Af/Mauritania
Tangier 11735– 25.56– 50– : to We Af/Mauritania
Tangier 15410– 19.47– 10– : to So. Morocco.
ANN: F: "Ici Rabat Radiodiff. Télévision Marocaine" E: "This is the Morroccan Broadc. and Television System Rabat" Sp: "Aqui Radiodif. Televisión Maroqui" – Voice of Morocco: F: "Ici Tanger la voix du Maroc" – V. by QSL-card. Records accepted. Rp. – **PUB:** Monthly magazine in Arabic – **F.PL:** 400kW LW-tr.

VOICE OF AMERICA RADIO STATION IN TANGIER

ADDR: Voice of America, Washington 25, D.C. USA.
STATIONS: Tangier 35/50/100kW: 02.00–07.30, 12.00–23.00.

kc	m	kc	m	kc	m	kc	m
5995	50.04	7135	42.05	9615	31.20	15315	19.59
6020	49.83	7170	41.84	9740	30.80	17705	16.94
6040	49.67	7245	41.41	11710	25.62	17815	16.84
6080	49.34	7250	41.38	11790	25.45	17855	16.80
6115	49.06	7270	41.27	11960	25.08	21455	13.98
6120	49.02	9565	31.36	15290	19.62	21690	13.83
6180	48.54						

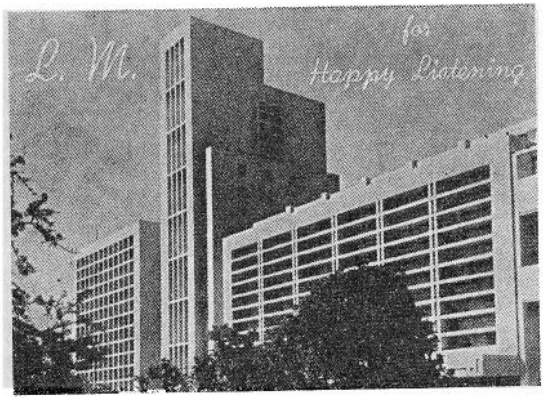
D.PRGR: Short Wave: See USA – **ANN:** "This is the Voice of America Relay St. at Tangier" – **INT-SIG:** Choir of Brass playing a 10 note version of "Columbia, the Gem of the Ocean", See USA – V. by QSL-card.

MOZAMBIQUE (Port. East Africa)

L.T: GMT+2 h – **Pr.L:** Portuguese, English, Local dialects, Afrikaans

RADIO CLUBE DE MOZAMBIQUE (Non-profit organization)

FI: By state, license, adv – **AD:** Portuguese: 04.30–12.00, 15.45–22.00. English: 03.30–23.00 – **ADDR:** P.O. Box 594, Lourenço Marques.



These are your

Lourenço Marques Radio

Wavebands for happy listening

04.00–05.00 on 917/4835/11780 kc
05.15–16.00 on 4835/6050/11780 kc
16.00–17,00 on 917/4835/ 6050/11780 kc
17.00–17.30 on 917/4835/11780 kc
17.30–22.00 on 917/3215/ 4835 kc
22.00–04.00 on 917/3215 kc

All times are GMT.

Freq's are changed according to propagation conditions.

LOURENÇO MARQUES *For Happy Listening*

For full information see below

Cable: Radioclube. **Te:** 4045 – **L.P:** Dir. Gen: Capt. A. dos Santos Figueiredo. Exec. Dir: H. A. da Silva Rodrigues. Dir. Tec: V. Rodrigues. Chief Portuguese Section: J. Mendonça. Chief English Section: D. Davies.

STATIONS: 15 tr's from 5 to 100kW.

kc	m	Prgr	kc	m	Prgr	kc	m	Prgr	kc	m	Prgr
737	407.1	A	3260	92.02	A	4865	61.66	*	11780	25.47	B
917	327.0	B	3300	90.90	**	4925	60.90	A	11835	25.35	A
1223	245.3	*	4835	62.05	B	6050	49.59	B	15295	19.62	C
1340	224.0	C	4860	61.73	Rlg.	6115	49.06	A	17775	16.88	C
3215	93.30	B									

FM: 98Mc (Prgr A+C). * = Ronga, Shangane; ** = Ronga, Shangane+Rlg. prgr.

"A" PRGR. in Portuguese: W 04.30–21.00, Sun 05.15–21.00.

Oct 64/March 65	kc	April/Sept 65	kc
04.30[1]–12.00	737, 4925, 6115, 11835+FM	04.30–06.30[2]	737, 4925, 6115, FM
12.00–16.30	737, 4925, 6115, 11835	06.30[1]–09.00 / 09.00–12.00	737, 4925, 6115, 11835+FM
16.30–17.00	737, 4925, 11835	12.00–15.00 / 15.00–16.00	737, 4925, 6115, 11835
17.00–17.30	737, 3260, 4925 11835	16.00–16.30	737, 4925, 6115
17.30–21.00	737, 3260, 4925	16.30–21.00	737, 3260, 4925

[1] = Sun 05.15 [2] = W only.

N: 05.15, 10.30, 16.30, 17.30, 20.30 – **Rlg:** Sun 07.00, 18.00 – **Wrp:** 10.30, 16.30 – **L.L. (English):** Tues 11.20, Fri 16.00.

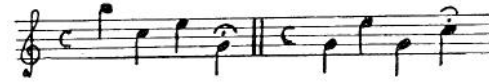
ANN: On the h: 4 notes on gong followed by "Aqui Portugal Moçambique fala-vos o R. Clube em Lourenço Marques transmitindo en ondas curtas e medias" – **INT-SIG:** Gong. V. by QSL-card.

"B" PRGR. in English, Afrikaans: D 24 h.

Oct 64/March 65	kc	April/Sept 65	kc
04.00–05.00	917, 4835, 11780	04.00–05.00	917, 3215, 4835
		05.00–05.30	3215, 4835
		05.30–05.45	4835, 11780
		05.45–15.00	4835, 6050, 11780
05.15–16.00	4835, 6050, 11780	15.00–16.00	917, 4835, 6050, 11780
16.00–17.00	917, 4835, 6050, 11780	16.00–16.15	917, 4835, 11780
17.00–17.30	917, 4835, 11780	16.15–17.00	917, 3215, 4835, 11780
17.30–22.00	917, 3215, 4835	17.00–21.00	917, 3215, 4835
22.00–04.00	917, 3215	21.00–04.00	917, 3215

Rlg. Prgrs: W 19.30–21.00, Sun 04.30–05.00, 19.30–21.15 on 3300 4860kc.

ANN: Every quarter-h and half h 4 notes on a gong followed by: "This is Lourenço Marques R. for Happy listening, broadc. from Portugal Mocambique...broadc. in the 25, 42, 49, 60, 92, 327 metre bands" – **INT-SIG:** Gong – V. by QSL-card. Records accepted – **PUB:** Monthly: Radio Mocambique.



"C" PRGR. in Portuguese (to Lourenço Marques & Europe): Sun 14.00–16.30 on 1340kc+FM, D 16.30–19.00 on 1340/15295kc +FM, 19.00–20.00 on 1340kc+FM. Special tr: Sun 08.00–10.00 on 17775kc – **N:** 17.30.

PRGRS in Ronga, Shangane: W 16.00–19.00 on 1223/3300/4865kc, Sat also 10.00–12.00 on 1223/4865kc, Sun 05.00–16.00 on 1223/4865kc, 16.00–19.00 on 1223/3300/4865kc. **Ronga:** W 17.30–19.00, Sat also 11.00–12.00, Sun 07.00–09.00, 10.30–12.00, 17.00–19.00. **Shangane:** W 16.00–17.30, Sat also 10.00–11.00, Sun 05.00–07.00, 09.00–10.30, 12.00–17.00.

REGIONAL STATIONS (all 0.25kW soon to be 5 kW):

Name	kc	m	Name	kc	m
Quelimane	935	321.0	Quelimane	4865	61.66
Nampula	1223	245.3	Porto Amélia	4940	60.73
Porto Amélia	1421	211.1	Quelimane	4972	60.33
Nampula	3200	93.75	Nampula	4975	60.30
Quelimane	3210	93.44	Porto Amélia	7115	42.16
Nampula	3300	90.90	Quelimane	7140	42.02
Porto Amélia	3395	88.37	Quelimane	7160	41.90
Nampula	4855	61.79	Nampula	7190	41.72

PORTO AMELIA (Emissor Reg. de Cabo Delgado):
Portuguese: Sun 05.30–07.30 on 1421/7115kc, 09.30–12.00 on 7115kc, 17.30–20.00 on 1421/3395kc; W 10.30–12.00 on 1421/7115kc, W exc. Wed, Fri: 16.00–19.00 on 1421/3395kc –
Macua do Medo: Sun 09.30–10.30 on 1421/7115kc, 16.00–17.30 on 1421/3395kc, Wed 16.30–19.00 on 1421/3395kc.
NAMPULA (Emissor Reg. do Norte):
Portuguese: W 04.30–05.30, 09.30–11.30 on 1223/4855/7190kc, Sun 07.00–08.30 on 1223/4855kc, 08.30–11.30 on 1223/4855/7190kc, D 16.30–18.00 on 1223/3200kc, 18.00–20.00 on 1223/3200/4855kc – **Macua:** D 17.00–18.00 on 4975kc, Sun also 06.00–08.30 on 7190kc.
QUELIMANE (Emissor Reg. da Zambézia):
Portuguese: 10.15 (Sun 08.00)–12.00 on 935/4865kc, 16.00–19.30 on 4865kc (Sun also 935kc) – **Chuabo:** Sun 05.00–06.00, 10.00–11.00 on 4972kc, D 17.00–18.00 (Sun, Wed, Sat 19.00) on 3210kc –
F.PL: Four 25kW sw-tr's and one 50kW mw tr. under construction. New st. at Beira mid 1965 using 1295, 1358, 3355, 4895, 6040, 7265, 9595kc on sched. identical to other Regionals.

Brown Boveri, Switzerland: mw+sw tr (Matola) 100kW – Wilhelm Franz KG, Germany, EMT studio equipment.

EMISSORA DO AERO CLUBE DA BEIRA (Priv, Comm.)
FI: By adv – **ADDR:** C.P. 3, Beira. **Cable:** Aero. **Te:** 2505 –
L.P: Dir: F. J. Silvério Moiteira.
STATIONS: mw 5kW, sw 0.3kW.
1430kc – 3255kc 92.15m – 7255kc 41.35m.
HOME SCE. in Portuguese: W 04.30–06.00, 09.30–11.30(Sat 12.00), 16.00–21.00, Sun 05.00–21.00. **N:** 04.50(W), 10.00, 16.50, 17.45, 20.15.
ANN: "Aqui Portugal, Moçambique fala-vos a Emissora do Aéro Clube da Beira" – **INT-SIG:** Gong – **V.** by QSL-card. Records accepted.

RADIO PAX (Rel, owned by Franciscan Fathers)
FI: By gifts and state – **ADDR:** C.P. 594, Beira. **Cable:** Radio Pax. **Te:** 2763 – **L.P:** St. Mgr. Dr. M. Reis M. Dir. Tec: A. Especial.
HOME SCE. in Portuguese, Vernaculars: W 04.00–05.30 (I), 09.30–11.30(Sat 12.00) (II), 15.30–21.00 (III); Sun 05.00–13.00 (I) 15.00–17.00 (II), 17.00–21.00 (III).

kc	m	kW	h of tr.	kc	m	kW	h of tr.
1295	201.7	1	I+II+III	5025	59.70	5	III
3952	75.90	0.5	I+II	7205	41.64	5	I+II

FM: 90Mc, 95Mc, 0.05kW: I+II+III
N. in Portuguese: 04.30(Sun 05.30), 10.15, 17.30, 20.30.
Vernaculars: W 15.30–16.30, Sun 12.00–13.00.
ANN: "Aqui Beira, Moçambique á R. Pax, Emissora Católica" – **V.** by QSL-card or letter – **INT-SIG:** Chimes. Prgr's open with religious choir – **F.PL:** 3 kW mw, 10 kW sw.

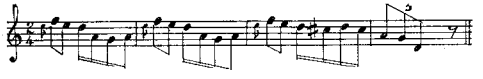
NIGER (Republic)

L.T: GMT+1 h – **Pr.L:** French, Hausa, Djerma, Tamachek, Peulh, Beriberi.
RADIO-NIGER (Go.)
ADDR: B.P. 361, Niamey. **Cable:** Radioniger. **Te:** 2272 – **L.P:** Dir: B. Lucas. Dir. Tec: L. Vigié. Dir. Prgr: A. Alirou.
STATIONS (System TRT):

kc	m	kW	Net	kc	m	kW	Net	kc	m	kW	Net
1511	198.4	1	I	4785	62.70	30	II	6060	49.50	4	I+III
3260	92.02	4	I	5020	52.76	4	II	7135	42.05	4	II

HOME SCE: Net.I: W 05.30–06.30 on 1511/3260kc, 11.30–13.17 on 1511/6060kc, 17.00(Sat 15.00)–21.15(Sat 22.30) on 1511/3260kc; Sun 07.00–16.30 on 1511/6060kc, 17.00–21.00 on 1511/3260kc. **Net.II:** W 05.30–06.30 on 5020kc, 11.30–13.17 on 7135kc, 17.00(Sat 15.00)–21.15(Sat 22.30) on 4785/5020kc; Sun 07.00–16.30 on 7135kc, 17.00–21.00 on 4785/5020kc. **Net.III:** W 06.30–11.30 on 6060kc. **N:** French (Net.I+II): W 06.00, 12.00, 13.00, 17.00, 18.45, 21.10, Sun 09.00, 12.00, 18.45, 21.10; Net.III: 07.30(W), 09.00(W), 10.30(W) – **L.L. (English):** Mon, Tues, Thurs, Fri 17.15(Net.I+II) – **N. in English:** Wed, Sat 17.15(Net.I+II) – **Vernaculars:** Net.I: 12.20, 18.00 Djerma, 17.30 Tamachek, 17.45 Peulh. Net.II: 12.20, 18.00. Hausa, 17.30 Beriberi. Net.III: 09.05, 10.35 Djerma, 09.10, 10.40 Hausa.

ANN: At opening and close down "La Nigerienne". Local flute and "Ici Niamey Radiodiffusion de la République du Niger".
INT-SIG: Local Flute.



V. by QSL-card. Records accepted – **F.PL:** Mw. rel. st's at Ni Guigmi, Zinder, Maradi – **PUB:** Prgr.schedule (weekly).

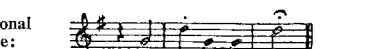
NIGERIA (Republic of)

L.T: GMT+1 h – **Pr.L:** English, Yoruba, Hausa, Ibo.
THE NIGERIAN BROADCASTING CORPORATION
(Statutory Corporation)
FI: By state plus comm. revenue – **AD:** 11 times per day: 05.20, 05.33, 06.10, 11.18, 12.10, 13.03, 13.30, 14.10, 17.45, 18.20.
ADDR: Broadcasting House, Lagos. **Cable:** Broadcast. **Te:** 26411. **L.P:** Dir. Gen: E. V. Badejo. Dir. Tec: D. M. T. Oke. Dir. External Sce: C. Achebe. Dir. Prgr. (Ag): Y. Olumide. Dir. Adm: H. N. Osakwe. Secr: O. Fashina. Dir. N. & Current. Affairs: H. Agedah.

NATIONAL PRGR. (from Lagos):
1458kc 206m 5kW: 05.00–22.30 (Sat 23.00, Sun 05.00–22.00).
4990kc 60.12m 20kW: 05.00–09.00, 14.00–22.30 (Sat 23.00. Sun 05.00–09.00, 14.00–22.00).
7255kc 41.35m 5kW: 08.00–16.00 (Sun 08.00–22.00).
N: English: 05.30, 06.00*, 07.00, 09.00, 10.00, 11.00, 12.00*, 13.00, 14.00*, 15.00, 16.00, 17.00, 18.00**, 19.00, 20.00**, 21.00, 22.00. * 10 min. ** 15 min. other times 3 min. news-summary.
Educational Prgr's in English: D 07.45, 09.30, 10.03, 11.03, 15.30.
N. in Hausa, Ibo, Yoruba: 08.00, 17.03, 21.03.
WEST REG. PRGR. (from Ibadan):
1358kc 221m 10kW: as Lagos 1458kc.
1397kc[1] 215m 0.25kW: as Lagos 1458kc. [1]=Ijebu-Ode, Warri.
3204kc 93.64m 10kW: Mon–Fri 05.00–07.00, 16.45–22.30. Sat 05.00–07.08, 16.45–23.00. Sun 05.00–07.08, 16.45–22.00.
7285kc 41.18m 10kW: D 07.15–16.30.
N. in English, Yoruba: 13.30, 19.00.
EAST REG. PRGR. (from Enugu):
1320kc 227m 10kW: 05.00–22.30 (Sat 23.00, Sun 05.00–22.00).
1397kc[2] 215m: as 1320kc.[2]=Onitsha, P. Harcourt.
1397kc[3] 214m 0.25kW: as 1320kc.[3]=Calabar.
3980kc 75.38m 2.5/5kW: 16.45–22.30 (Sat 23.00).
6145kc 48.82m 2.5/5kW: 07.15–16.30.
N. in English, Ibo, Efik: 14.30, 19.00.
NORTH REG. PRGR. (from Kaduna):
1416 kc 212m 1kW: 05.00–22.45(Sat 23.15, Sun 22.15).
1376[4] – 218– : 05.00–22.30(Sat 23.15, Sun 22.35).
1397[5] – 214– : 05.00–22.30(Sat 23.15, Sun 22.35).
3326 – 90.20– 7.5/20 – : 05.00–08.00, 16.45–22.45(Sat 23.15, Sun 22.15).
3396 – 88.36– 10 – : 16.45–22.45(Sat 23.15, Sun 22.15).
6175 – 48.58– 20 – : 07.30–16.30.
9655 – 31.07– 10 – : 09.30–16.30.
[4]=Kano. [5]=Jos, Sokoto, Ilorin, Maiduguri, Zaria, Katsina.
N. in English, Hausa: 14.30, 19.00.

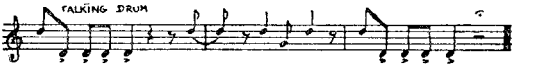
EXTERNAL SERVICES to No, Ea, C. and So. Africa, M. East (from Lagos): 13.00–20.00 on 7275/9690kc (10kW), 11900/15255 kc (100 kw). **English:** 14.00–15.00, 17.00–19.00. **N:** 14.00, 17.00, 18.00* – **French:** 16.00–17.00, 19.00–20.00. **N:** 16.00*, 19.00 – **Arabic:** 15.00–16.00. **N:** 15.00 – **Hausa:** 13.00–14.00. * 10 min. newscast.

ANN: "This is R. Nigeria" or "This is Voice of Nigeria"
INT-SIG: National prgr: Talking Drum.

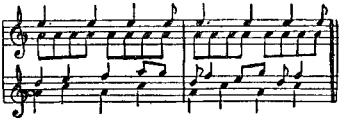


North Regional Programme: Trumpet-Type Instrument.

West Regional Programme: Talking Drum.



East Regional Programme: Snake Drum-Xylophone Bass.



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(2) 15.255mcs – 19 metres

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EASTERN NIGERIA BROADCASTING SERVICE (Go.)
ADDR: Box 350, Enugu. **Cable:** Easteller. **Te:** 2579.
L.P: Gen. Mgr: K. Okoronkwo. Sen. Eng: A. S. Alaribe.
STATIONS: 953kc 315m 10kW – 4855kc 61.79m 10kW.
HOME SCE: W 05.00–23.00, Sun 06.00–22.00. **N. in English:** 05.30, 11.00*, 13.00*, 13.45, 17.00, 18.00*, 20.00*, 20.45, 22.55(W) – **Vernaculars** (Ibo, Efik, Ijaw): 06.15, 06.30, 06.45, 12.00, 18.09, 18.20, 18.30. *=BBC.
ANN: "This is the Eastern Nigeria Broadc. Sce" or "This is the Voice of Eastern Nigeria" – **INT-SIG:** Drum (repeated) – V. by letter or QSL-card. Records accepted – **F.PL:** 500kW mw-tr. to commence operation mid 1965.

RADIO TELEVISION KADUNA (Comm.)
FI: By commercials but subsidised – **ADDR:** P.O. Box 250, Kaduna, No. Nigeria. **Cable:** Radionorth. **Te:** 2294 – **L.P:** Man. Dir: L. A. W. Diamond. Chief Eng: R. Sharpe.
STATIONS: 940kc 10/250kW – 6090kc 49.26m 10kW.
HOME SCE. in English, Hausa: 05.00–09.30, 14.00–21.00 on 940/6090kc – **N: English:** 05.30, 09.00, 14.15, 18.30. **Hausa:** 05.40, 09.10, 14.25, 18.40.
ANN: "This is Radio Television Kaduna" – **INT-SIG:** Bauchi Drums. V. by letter. Records accepted.
Brown Boveri, Switzerland: One 250kW mw-tr. (Jaji) one 10kW sw-tr.

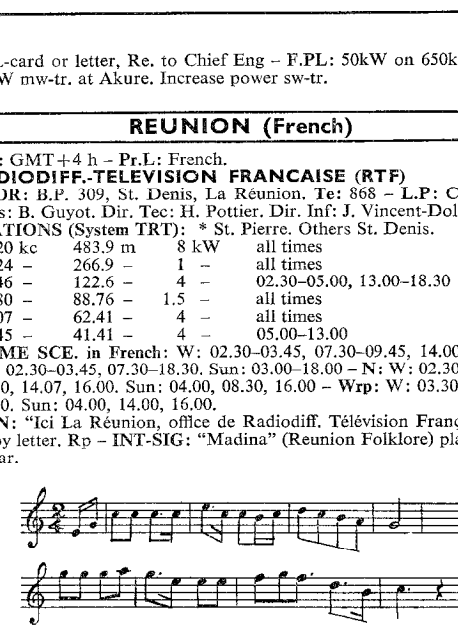
WESTERN NIGERIA RADIOVISION SERVICE LTD. (Comm.)
FI: 100% from We. Reg. Go. of Nigeria – **AD:** D 6 min. each h – **ADDR:** P.O. Box 1460, Ibadan. **Cable:** Radvision. **Te:** 24381 – **L.P:** Dir: V. O. Fayemi. Secr: A. Oyelowo. Dir. Tec: J. O. Oyeleye. Contr. of Prgr's: S. Rhodes. Public Rel. Officer: J. O. Olagboju.
STATIONS: Abafon 602kc 10kW – Ibadan 656kc 10kW
Ibadan *3380kc 88.70m 10kW – **6185kc 48.50m 10kW
* 05.00–06.15, 16.40–23.05 ** 06.15–16.40.
HOME SCE: W 05.00–22.05(Sat 23.05), Sun 06.00–22.05. **N. in English:** 05.30, 06.00, 07.00(BBC), 17.00 – **N. in Yoruba, Edo, Hausa:** 15.00 – **ANN:** "This is the Western Nigeria Broadc. Sce" or "This is WNBC, Ibadan" – **INT-SIG:** Chimes – 2 notes only (G & E) – V. by QSL-card or letter, Re. to Chief Eng – **F.PL:** 50kW on 650kc; New 10kW mw-tr. at Akure. Increase power sw-tr.

REUNION (French)

L.T: GMT+4 h – **Pr.L:** French.
RADIODIFF.-TELEVISION FRANCAISE (RTF)
ADDR: B.P. 309, St. Denis, La Réunion. **Te:** 868 – **L.P:** Chef des Sce's: B. Guyot. Dir. Tec: H. Pottier. Dir. Inf: J. Vincent-Dolor.
STATIONS (System TRT): * St. Pierre. Others St. Denis.

620 kc	483.9 m	8 kW	all times
*1124 –	266.9 –	1 –	all times
2246 –	122.6 –	4 –	02.30–05.00, 13.00–18.30
3380 –	88.76 –	1.5 –	all times
4807 –	62.41 –	4 –	all times
7245 –	41.41 –	4 –	05.00–13.00

HOME SCE. in French: W: 02.30–03.45, 07.30–09.45, 14.00–18.00. Sat: 02.30–03.45, 07.30–18.30. Sun: 03.00–18.00 – **N:** W: 02.30, 03.30, 08.30, 14.07, 16.00. Sun: 04.00, 08.30, 16.00 – **Wrp:** W: 03.30, 14.07, 16.00. Sun: 04.00, 14.00, 16.00.
ANN: "Ici La Réunion, office de Radiodiff. Télévision Française" – V. by letter. Rp – **INT-SIG:** "Madina" (Reunion Folklore) played on guitar.



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RWANDA (Republic of)

L.T: GMT+2 h – Pr.L: Kinyarwanda, Swahili, French.

RADIODIFFUSION DE LA REPUBLIQUE RWANDAISE (Go.)

ADDR: B.P. 83, Kigali. Cable: "Radiorwanda". Te: 42 – L.P: Chief of Inf. Sce: N. Buregeya.

STATION: 6058 kc 49.52 m 5 kW.

HOME SCE. in French, Kinyarwanda, Swahili: 04.00–05.30, 09.00–11.30, 15.00–20.00 – N: French: 04.30, 10.15, 18.00. Kinyarwanda: 05.00, 10.45, 17.00. Swahili: 11.00, 17.15.

ANN: "Ici Kigali, Station Nationale de Radiodiffusion de la République Rwandaise" – INT-SIG: Inanga (local harp) – V. by QSL-card. Rp. Records accepted – PUB: Prgr.schedule free – F.PL: 50kW international st. April 1965.

SAO TOMÉ E PRINCIPE (Port W.Africa)

L.T: GMT – Pr.L: Portuguese.

RADIO CLUBE DE SAO TOMÉ (Comm.)

ADDR: Av. Infante D. Henrique, C.P. 10/2a, Sao Tomé. Te: 530 – L.P: Pres: R. S. de Almeida Carvalho. Dir. Tec: F. R. Teixeira.

STATIONS: CQA 760kc 395m 5kW – 4765kc 62.95m 1kW.

HOME SCE: W 06.00–07.00, 12.00–13.00, 18.30–22.00, Sun 09.00–13.00, 18.30–22.00 – N: 12.15, 19.00 – Mbg (DX-QSL): Sat 20.00 (fortnightly) – ANN: "Aqui Portugal, Provincia de Sao Tomé e Principe, fala vos o R. Clube de Sao Tomé transmitindo na..." – V. by QSL-card. Rp. Prgr.schedule free.

Continental Electronics, USA: 1kW, 10kW sw-tr's.

SENEGAL (Republic)

L.T: GMT – Pr.L: French, Ouolof, Sérére, Toucoulour, Portuguese.

RADIODIFFUSION DU SENEGAL (Go.)

FI: By Go. and adv – ADDR: B.P. 1765, Dakar. Cable: Radio Senegal. Te: 320-72 – L.P: Dir. Gen: B. A. Ibrahima.

STATIONS (System: CFTH, RCA, TRT, BBC):

kc	m	kW	Net	kc	m	kW	Net	kc	m	kW	Net
764	392.6	200	I	4890	61.95	25	II	5975	50.24	25	I
1304	230.0	8	II	4950	60.60	4	II	9720	30.86	4/100	
1538	196.0	10	I	5960	50.34	4/100	I				

Reg. St's: St. Louis (Senegal III): 1484kc 202.2m 1kW – Ziguinchor (Senegal IV): 3336kc 88.89m 4kW – 6070kc 49.42m 4kW.

R. SENEGAL I (International Netw): W 06.00–10.00, 12.00–15.00, 17.00–24.00, Sat 06.00–10.00, 12.00–24.00, Sun 07.00–24.00. On 1538kc: as above – On 4950/5960kc (4/100kW): 06.00–10.00, 17.00 (Sat/Sun 18.00)–24.00. On 5960/9720kc (4/100kW): 10.00–17.00(Sat/Sun 18.00).

R. SENEGAL II (Nat. Netw): W 06.00–10.00, 12.00–15.00, 17.00–24.00, Sat 06.00–10.00, 12.00–24.00, Sun 07.00–24.00. On 764kc: as above. On 4890kc: 06.00–10.00, 17.00(Sat/Sun 18.00)–24.00. On 5975 kc: 10.00–17.00(Sat/Sun 18.00).

Saint Louis (Reg. Netw): 1484kc: as Nat. Netw.

Ziguinchor (Reg. Netw): On 3336kc: 06.00–10.00, 17.00(Sat/Sun 18.00)–24.00. On 6070kc: 10.00–17.00(Sat/Sun 18.00).

ANN: F: "Ici Sénégal Inter émettant de Dakar sur..." – "Ici Senegal II, Chaine Nationale émettant de Dakar". E: "This is the English prgr. of the International Sce. of the Sengalese Broadc. System" – INT-SIG: Melody on "Khora" (local Harp) – V. by QSL-card. Rp.

SEYCHELLES (British)

L.T: GMT+4 h – Pr.L: English, French, Creole.

SEYCHELLES BROADCASTING SERVICE (Go.)

ADDR: Dept. of Tourism & Inf, P.O. Box 92, Victoria. Cable: Tourism. Te: 447 – L.P: Dir: D. J. Knox. Broadc. Asst: Miss G. LowHang. Dir. Tec: N. Brooks.

STATION: ZCQ3 4990kc 60.12m 0.04kW.

HOME SCE: 14.15–16.15. N(BBC): 16.00 – ANN: E: "This is R. Seychelles".

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Sundvej 6, Hellerup, Denmark.

SIERRA LEONE

L.T: GMT – Pr.L: English, Mende, Temne, Krio.

SIERRA LEONE BROADCASTING SERVICE (Go.)

FI: By state, license payments and adv – AD: Comm. spots now accepted – ADDR: New England, Freetown. Cable: Broadcasts. Te: 3051-9 – L.P: Dir. of Broadc: J. J. Akar. Head of Prgr's: G. H. Cowan. Chief Eng. (Ag): P. F. George.

STATIONS: 1200kc 10kW – 3316kc 90.46m 5/10kW – 5980kc 50.17m 5kW.

HOME SCE: 06.00–10.15, 13.00–13.30, 15.45(Sun 15.00)–23.00 (Sun 23.15). N. in English (BBC): 07.00, 16.00, 20.00. Nat N: 06.45 (Vernaculars, English), 18.00 (Vernaculars), 20.10 (English) – "African Magazine": Fri 21.00 – Panorama: Tues 21.00 – Reflections: Mon 22.00.

ANN: "This is Sierra Leone Broadc. Sce" – INT-SIG: "The rain is coming" played by Military Band – V. by letter. Records accepted.

The Marconi Company Ltd, G.B: 2×10kW sw-tr's.

SOMALI (Rep.)

L.T: GMT+3 h – Pr.L: Somali, Italian, Arabic, English.

NATIONAL BROADCASTING STATION (Go.)

ADDR: Radio Mogadiscio, Mogadiscio. Te: 444.

STATIONS: 4970kc 60.36m 5kW – 7150kc 41.96m 5kW.

HOME SCE: 09.30–11.00, 13.00–15.30, 16.30–19.00. N. in Somali: 11.00, 14.00, 17.00 – ANN: Italian: "Transmette Mogadiscio".

RADIO SOMALI (Go.)

ADDR: P.O. Box 14, Hargeisa, Northern Region. Cable: Informat. Te: 15 – L.P: Dir. Gen: M. Hashi. Broadc. Officer: A. Dualeh.

STATIONS: 4797kc 62.54m 10kW – 9675kc 31.01m 5kW.

HOME SCE. in Somali: 09.30(Fri 09.00)–11.30, 13.30–15.30, 16.30–17.30. N. in Somali (relayed from R. Mogadiscio): 11.00, 14.00, 17.00 – English: 15.30–16.30. N: 16.00 – ANN: "Halkan WAA. R. Somali, Hargeisa" (This is Hargeisa, Somali) – INT-SIG: March – V. by QSL-card.

The Marconi Company, G.B: 1×10kW mw-tr.

SOMALILAND (French)

L.T: GMT+3 h – Pr.L: French, Somali, Afar, Arabic.

RADIO-DJIBOUTI (Rdiff. Télévision Francaise)

ADDR: B.P. 97, Djibouti. Cable: Radiodiffusion. Te: 177 – L.P: Dir: R. Marchand. Eng: R. Ziegler.

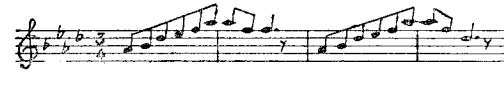
STATIONS (System TRT):

1538 kc 195.0 m 4 kW – 4780 kc 62.76 m 4 kW

HOME SCE: 09.00–11.30 (Sun 07.00–12.00) on 1538/4780kc, 14.45–16.00 on 1538kc, 16.00–19.00 on 1538/4780kc.

French: 09.00–09.45 (Sun 07.00–10.30) on 1538/4780kc, 16.00–17.00 on 4780kc, 17.00–19.00 on 1538kc. N: 09.15, 17.00 – Afar: 11.00–11.30 (Sun 11.30–12.00) on 1538/4780kc, 15.30–16.45 on 1538kc. N: 11.15, 16.30 – Somali: 10.00–11.00 (Sun 10.30–11.30) on 1538/4780kc, 14.45–15.30 on 1538kc. N: 10.45, 15.15 – Arabic: 09.45–10.00 on 1538/4780kc, 16.45–17.00 on 1538kc, 17.00–19.00 on 4780kc. N: 09.45, 16.45.

ANN: F: "Ici Djibouti Radiodiff.-Télévision Française". Afar: "Ah Djibouti Radio". Arabic: "Houna Djibouti dar el Iza'a el Francia lil Radio-wal Television". Somali: "Al kani wa Radio-Djibouti" – INT-SIG: Extrait de la "Suite Française" de D. Milhaud. (Guitar), all French prgrs – V. by letter and QSL-card. Rp. Records accepted.



SOUTH AFRICA (Republic)

L.T: GMT+2 h – Pr.L: English, Afrikaans, Bantu (S. Sotho, Zulu, Tswana, Xhosa, N. Sotho).

SOUTH AFRICAN BROADCASTING CORPORATION (Indep. Org.)

FI: By license payments and adv – ADDR: P.O. Box 8606, Johannesburg. Cable: Broadcast. Te: 231151.

L.P: Chmn: Dr. P.J. Meyer. Sen. Dir: N.L. Filmer. Dir. Prgrs: C.D. Fuchs. Dir. Finance: J.N. Swanepoel. Chief Eng: H.O. Collett. Head Publ. Rel: J.J. Kruger. Head Comm. Sce: H.J. Howell. Head Ext. Sce: J.A. Jooste. Head English Sce: A. Falkiner. Head Afrikaans Sce: P. de Bruyn.

HOME SERVICES: National Medium-Waves: 0.5/1/2/5/10kW.

	kW	English kc	Afrikaans kc	Comm. kc
Johannesburg:				
West Rand	5	638	719	575
East Rand	5	1034	827	1286
Pretoria	2	1439	1097	1268
Bloemfontein	5	674	593	782
Kimberley	0.25	1070	1241	962
Grahamstown	5	620	701	908
Port Elizabeth	2	1313	1043	1178
East London	0.4*	1025	1151	908
Cape Town	10	656	557	728
Durban	5	566	692	800
Pietermaritzburg	5	764	665	845
Pietersburg	5	1115	863	989

* Comm. Sce. 1kW.

D.PRGR: English, Afrikaans: 03.30–21.15 (incl. Bantu Prgr's W 03.30–04.30, 07.30–08.00) – **N: English:** 05.00, 06.00, 09.00, 11.15, 14.00, 16.00, 17.15, 19.00, 21.00, 02.55. **Afrikaans:** 04.45, 06.00, 09.00, 11.15, 14.00, 16.00, 17.00, 19.00, 21.00, 22.03.

Comm. Sce. (Springbok R.): W 03.00–22.00, Sun 04.00–22.00 – **N: English:** W 04.30, 05.30, 09.29, 11.00, 14.29, 17.00, 20.30; Sun 11.00, 16.30. **Afrikaans:** W 03.45, Sun 06.30, 19.30.

FM:	kW	English Mc	Afrikaans Mc	Nat. Comm. Mc	Reg. Comm. Mc
Johannesburg	10	95.51	103.42	99.47	87.60
Welverdiend	3	93.71	89.75	97.66	–
Rustenburg	3	102.99	106.95	95.08	–
Pretoria	5*	88.98	96.89	92.93	90.95
Durban and Pietermaritzburg	10	90.01	105.83	93,96	–
Constantiaberg	3	89.49	105.32	97.40	–
Table Mountain	0.25	106.69	102.74	90.87	–
Port Shepstone	3	102.65	90.78	98.69	–
Port Elizabeth	3	103.51	99.55	87.69	–
Grahamstown	3	93.45	101.36	89.49	–
Keiskammahoek	3	100.59	92.67	104.54	–
East London	3	107.12	95.25	91.30	–
Bloemfontein	10	103.94	88.12	96.03	–
Theunissen	3	103.17	99.21	107.12	–
Napier	3	99.21	95.25	103.17	–

* Reg. comm. sce 0.8kW.

D.PRGRS: English and Afrikaans: 03.30 (Sun 04.00)–21.15 (Sat 22.00) **Nat. Comm. Sce:** 03.00(Sun 04.00)–22.00 – **Reg. Comm. Sce:** 24 h every day.

National Shortwave Stations (Paradys) 20kW:

English Sce.		Afrikaans Sce.		Comm. Sce.	
kc	m	kc	m	kc	m
2326	129.50	2346	128.0	2376	126.3
3376	88.89	3320	90.34	3250	92.31
4895	61.29	4810	62.37	4945	60.67
6095	49.22	6005	49.96	6150	48.78
7275	41.24	7230	41.49	7185	41.76
9525	31.50	9650	31.09	9720	30.86

Wave bands in use and times of operation on various freq's are changed to suit propagation conditions.

Schedule October 64 – April 65

English	Afrikaans	Comm. Sce.	m.b.
03.30–05.15	03.30–05.30	03.00–05.00	90, 60, 49
05.15–07.10	05.30–07.05	05.00–07.00	31, 60, 49
07.10–16.00	07.05–14.25	07.00–16.00	31, 41, 49
16.00–17.15	14.25–15.50	16.00–17.15	31, 60, 49
17.15–21.15	15.50–21.15	17.15–22.00	90, 60, 49
22.00–03.00	22.00–03.00		90, 60

Freq. change times are approx. On Sun English & Afrikaans commence at 04.00, Comm. Sce. Sun 04.00–22.00.

FM Services in Vernaculars: D. 03.30–20.00.

	kW	Mc		kW	Mc
So. Sotho			Rustenburg	3	99.04
Johannesburg	10	91.56	Pretoria	5	100.84
Welverdiend	3	101.62	Bloemfontein	10	99.98
Bloemfontein	10	92.07	Theunissen	3	95.25
Theunissen	3	91.30	**Xhosa**		
No. Sotho			Constantiaberg	3	93.45
Pretoria	5	104.80	Table Mountain	0.25	94.82
Zulu			Port Shepstone	3	94.74
Johannesburg	10	107.38	Cala	0.8	107.72
Pretoria	5	104.80	Umtata	0.8	105.57
Pietermaritzburg	10	97.92	Port Elizabeth	3	91.64
Port Shepstone	3	106.61	Grahamstown	3	105.32
Tswana			Keiskammahoek	3	88.72
Welverdiend	3	105.57	East London	3	103.17

AFRICA SERVICE: International St. at Paradys near Bloemfontein.

STATIONS: 20kW.

kc	m	kc	m	kc	m	kc	m
6150	48.78	9525	31.50	15155	19.80	17805	16.85
7270	41.27	11900	25.21	15220	19.71		

Nov/Feb	March/April	kc
03.00–04.00	03.00–04.00	6150, 7270
10.00–16.30	10.00–15.45	15220, 17805
16.30–18.00	15.45–17.30	11900, 15220
18.00–20.00	17.30–18.45	9525, 11900
20.00–21.15	18.45–21.15	7270, 9525

On Sun session commences at 11.00.

NEWS	L.	Nov/Feb(kc)		March/April (kc)	
03.45–04.00	Afrikaans (Springbok R)	7270	6150	7270	6150
11.00–11.15	**English** (Springbok R)	17805	15220	17805	15220
11.15–11.25	Afrikaans	17805	15220	17805	15220
11.30–11.35	**French** (Mon–Fri)	17805	15220	17805	15220
14.00–14.03	**English** (Mon, Wed, Fri)	17805	15220	17805	15220
15.45–15.55	***Portuguese** (Mon-Fri)*	17805	15220	11900	15220
16.00–16.05	**English** (Sat/Sun)	17805	15220	11900	15220
16.30–16.42	**English**	11900	15220	11900	15220
17.00–17.10	Afrikaans (W)	11900	15220	11900	15220
17.15–17.25	**French** (Mon–Fri)	11900	15220	11900	15220
19.00–19.10	**English**	11900	9525	7270	9525
21.00–21.05	*Springbok R.	7270	9525	7270	9525

* Afrikaans (Mon, Wed, Fri), English (other days).

Prgr. in French: 17.15–18.00 (Mon–Fri). **Prgr. in Portuguese:** 15.45–16.30 (Mon–Fri).

ANN: E: "This is R. South Africa". Afrikaans: "Dit is R. Suid-Afrika". Comm. Sce: "This is Springbok Radio" – **INT-SIG:** Comm. Sce (02.57): First Five notes of "Vat jou goed en trek Ferraira" – V. by OSL-card – **PUB:** "SABC/SAUK Bulletin".

AKG, Austria, delivered studio equip. (Recorders, microphones).
Telefunken AG, Germany, delivered 43 FM-tr's (0.8 and 3kW).
The Marconi Company Ltd, G.B. 9×20kW (Bloemfontein), 3×5kW (Pietermaritzburg), 3×5kW (Grahamstown), 1×5kW (Maraisburg), 1×5kW (Welgedacht).
Continental Electronics, USA, delivered 5kW mw-tr.
Wilhelm Franz KG, Germany, delivered EMT studio equipment.

SOUTHERN RHODESIA

L.T: *GMT+2 h* – **Pr.L:** *English, Shona, Sindebele.*

SOUTHERN RHODESIA BROADCASTING CORPORATION

(Indep. Statutory Body, established by So Rhodesia Act of Parliament) **FI:** by Go, license payments & adv – **ADDR:** P.O. Box 8008, Causeway, Salisbury. **Cable:** Broadcasts. **Te:** 61331 – **L.P:** Chmn of Board: J. M. Helliwell. Dir. Gen: J. H. Parry, O.B.E. Dep. Dir. Gen: D. A. Stephen. Dir. African Sce: B. J. Gilbert. Chief Eng: J. Grahame, A. M. BRIT I. R.E.

STATIONS: G=General Comm. Sce; A=African Comm. Sce.

Medium Waves:	kc	kW	Sce		kc	kW	Sce
Salisbury	584	2	G	*Que Que*	1255	0.175	G
Gwelo	683	2	G	Bulawayo	611	2	G
Gwelo	710	2	A	Gatooma	791	2	G
Ft. Victoria	855	1	G	Umtali	980	2	G
Salisbury	890	2	A	Bulawayo	1340	2	A

Short Waves: Gwelo

kc	m	kW	Sce	kc	m	kW	Sce
2425	124.6	2.5	G	5012	59.86	20	G
3306	90.73	10	A	5975	50.21	10	A
3396	88.36	20	G	6020	49.83	20	G
4828	62.16	10	A	7175	41.81	2.5	A

HOME SCE: General Sce: W 03.55–12.00, 15.00–21.05(Sat 03.55–22.00), Sun 05.55–12.00, 14.00–20.05.
On 2425kc: W 03.55–06.15, 15.00–21.05(Sat 22.00). Sun 15.00–20.05.
On 3396kc: W 03.55–06.15, 15.00–21.05(Sat 22.00). Sun 14.00–20.05.
On 5012kc: W 06.15–12.00(Sat 14.15), Sun 05.55–12.00.
African Sce: W 03.30–06.15(Sat 07.00), 09.00(Sat 10.00)–20.00, Sun 09.00–20.00.
On 3306kc: W 03.30–06.15(Sat 07.00), D 14.05–20.00. **On 4828kc:** 09.00(Sat 10.00)–14.00. **On 7175kc:** 10.00(Sat 10.57)–14.30.
Note: The continued use of 4828kc and 5012kc will depend on the effect of the present sunspot conditions within the next few months. *If considerable improvement results, these freq's will be replaced by* 5975kc and 6020kc for A and G services respectively. Present indications are that the above list of sw-freq's will apply during the period March/April, 1965.
NEWS in English: Gen. Comm. Sce: 04.00 (W), 05.00 (W), 06.00*, 09.00(Sun), 11.00*, 11.10, 16.00*, 17.45, 20.00(Sun), 21.00 (W). **African Comm. Sce:** 04.00 (W), 06.00 (W)*, 09.00 (Sun), 11.00*, 11.10, 16.00*, 17.45.*)=BBC.

ANN: E: "This is the Southern Rhodesia Broadc. Corpo" – INT-SIG: 5 min's prior to opening English Sce, peal of Church Bells; 5 min's prior to opening African Sce, Kalimba Xylophone, drums – V. by QSL-card. Re. to Chief Engineer.

Wilhelm Franz K.G., Germany, delivered EMT studio equipment.

SUDAN

L.T: GMT+2 h – Pr.L: Arabic, English.
SUDAN BROADCASTING SERVICE (Go.)
ADDR: P.O. Box 572, Omdurman. Cable: Izaa – L.P: Sen. Contr: Major El tag Hamad.
STATIONS: mw, 50kW, sw 7.5/20kW.

575 kc	521.7 m	9508 kc	31.55 m
4494 –	66.78 –	11855 –	25.31 –

Arabic: D 04.00–11.30, 12.30–13.00, 14.00–21.00 on 575/4494/9508/11855kc – Local Prgr. for So. Sudan: D 13.00–14.00 on 575/4494/9508/11855kc – European Prgr. (English): D 11.30–12.30 on 575/4494/9508/11855kc – ANN: Arabic: "Huna Omdurman". E: "This is the Sudan Broadcasting Service" – V. by letter – F.PL: 2×100kW mw-tr's, 50kW sw-tr. at Soba.

The Marconi Co. Ltd, G.B. delivered 50kW mw-tr, 2×20kW sw-tr's.

Wilh. Franz KG, Germany: EMT studio equip.

SWAZILAND (Brit. Protectorate)

L.T: GMT+2 h – Pr.L: English, Vernaculars.
TIGER RADIO (British Forces)
ADDR: Matsapa – L.P: St. Dir: Capt. D. Rowe.
STATION: 746kc 402m 0.25kW.
HOME SCE in English: 21 hrs per week – V. by letter.

TANGANYIKA

L.T: GMT+3 h – Pr.L: Kiswahili, English.
TANGANYIKA BROADCASTING CORP. (Indep-Comm.)
FI: In part grant in aid by Go, license payments. Fee: 10 sh.
ADDR: Broadc. House Box 9191, Dar es Salaam. Te: 63342. Cable: Sauti – L.P: Dir. Gen: M. B. Mdoe. Dir. Prgr: D. Wakati. Dir. Tec: Y. Kazibure.
STATIONS:

kc	m	kW	Prgr	kc	m	kW	Prgr
836	359.0	1.25	Nat.	5050	59.41	20	Nat.
1025	292.7	1.25	2nd	7165	41.87	20	Nat.
1250*	240.0	1.25	Nat/3rd	7280	41.21	10	2nd
3251	92.58	5	Nat.				
4785	62.70	10	Nat/2nd/3rd * Mwanza. Others Dar es Salaam				

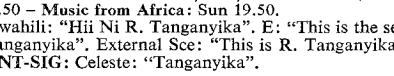
HOME SCE: National Prgr. (Kiswahili): W 03.15–05.00 on 836/3251/5050kc, 09.00–10.30(Sat 13.30) on 836/7165kc, 13.00–15.00 on 836/5050kc, 15.00–19.00 on 836/3251/5050kc, 19.00–20.00 on 836/4785kc. Sun 03.15–05.00 on 836/3251/5050kc, 05.00–07.00 on 836/5050kc, 07.00–13.30 on 836/7165kc, 13.30–15.00 on 836/5050kc, 15.00–19.00 on 836/3251/5050kc, 19.00–20.00 on 836/4785kc – N: 04.00, 10.00, 13.00, 17.00, 19.00.

2nd Prgr. (English): 09.00–10.30(Sat 14.00, Sun 05.00–14.00) on 1025/7280kc, 14.00–19.00 on 1025/4785kc. N: 05.00(Sun), 10.00, 16.00, 18.00(BBC) – Wrp: 17.00.

3rd Prgr. (Educ.) in Swahili & English: 14.30–16.00 on 1250/4785kc. N: 14.30 – L.L: "Swahili by Radio": Fri 15.00, "French by Radio": Wed 15.00.

External Sce: 19.00–20.00 on 836/7165/9530kc – N: 19.05 – Actuality: Mon 19.50 – Music from Africa: Sun 19.50.

ANN: Swahili: "Hii Ni R. Tanganyika". E: "This is the second Prgr. of R. Tanganyika". External Sce: "This is R. Tanganyika's External Sce" – INT-SIG: Celeste: "Tanganyika".



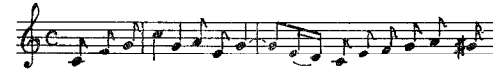
V. by QSL-card (for Amateurs), by letter (for ordinary listeners). Records accepted – F.PL: A 100kW mw st. (comm) to operate approx. July 1st 1965 at Dar es Salaam.

TOGO (Republic)

L.T: GMT – Pr.L: Ewe, Cabrais, Cotocolis, Hausa, Moba, Bassari.
RADIODIFFUSION DU TOGO (Go.)
ADDR: B.P. 434, Lomé. Te: 2492. Cable: Radio Togo – L.P: Dir: G. Ekue. Dir. Tec: T. Mensah-Boboe.
STATIONS: (Systems TRT).

1394 kc	215.0 m	1 kW	–	5047 kc	59.44 m	4/100 kW
3222 –	93.10 –	100 –	–	6155 –	48.74 –	4/100 –

HOME SCE. in French, Vernaculars: W 05.30–08.00 on 1394/5047kc 12.00–14.00 on 1394/6155kc, 17.30–23.00 on 1394/5047kc. Sat 05.30–08.00 on 1394/5047kc, 12.00–15.00 on 1394/6155kc, 15.00–23.00 on 1394/5047kc. Sun 06.00–10.00 on 1394/5047kc, 10.00–15.00 on 1394/6155kc, 15.00–23.00 on 1394/5047kc.
N: French: 05.30(W), 06.30(W), 06.00(Sun), 07.30(Sun), 12.30, 19.30, 22.00 – Vernaculars: W 05.50–06.00, 13.00–13.10, 17.30–19.00. Sun 13.00–13.10, 18.15–18.45. English: 21.00.
INT-SIG: Solo (on African bow):



ANN: "Ici Lomé Radiodiffusion du Togo". At opening and close down: Hymne Togolais – V. by QSL-card or letter – PUB: Prgr sched. (weekly).

Telefunken A.G, Germany, delivered 100kW sw-tr, studio equip.

TUNISIA

L.T: GMT+1 h – Pr.L: Arabic.
RADIODIFFUSION TELEVISION TUNISIENNE (Go.)
FI: By state and license payments – ADDR: 139, Avenue de Paris, Tunis. Te: 259311 – L.P: Dir. Gen: H. Boulares. Dir. Tec: M. Chaffai.

HOME SERVICE

ARABIC NETWORK: Nat. Prgr: 05.00(16/6–30/9: 04.30)–23.30.
Tunis I 629kc 477m 300kW – Sfax II 602kc 498.4m 5kW
FM: 96.5Mc 3kW – 6125kc 48.98m 50kW: 04.30–06.00 (to Morocco), 15.00–23.30 (to Morocco, Mid East) – 11970kc 25.06m 50kW: 06.00–15.00 (to Mid East) – N, Wrp: Every h on the h at 05.00–17.00, 19.00, 21.30, 23.00.
Sfax I 584kc 513.7m 0.05kW – Sfax II 602kc 498.4m 5kW
12.00–16.00, 19.30–21.00 – N, Wrp: 13.00, 14.00, 19.00, 20.55.
INTERNATIONAL NETWORK: Tunis II 962kc 312m 100kW – FM: 90.1Mc 3kW.
French: 05.00–07.00, 11.30–13.30, 16.00–22.00. N, Wrp: 05.00, 05.30, 06.30, 11.30, 12.30, 17.30, 18.30, 21.45 – English: 22.00–23.00. N: 22.30 – Italian: W 13.30–14.30. Sun 10.00–11.00. N: 14.00(Sun 10.30).
FOREIGN SCE. in Arabic: 6125kc Morocco, 15.00–17.00 Mid East.
ANN: Arabic: "Huna Al Ida A Att Tunissia" – F: "Ici Tunis Radiodiff. Télévision Tunisienne" – F: "This is Tunis, the Tunisian Broadc. System" – I: "Radiodiff. Tunisina, Rete Internazionale Programma Italiano" – V. by QSL-card. Re. in E or F. Records accepted – PUB: R. Revue "Al Idha'a" in French, Arabic (free).

Telefunken A.G, Germany: studio equip. (recorders).
Wilh. Franz KG, Germany: EMT studio epuip.

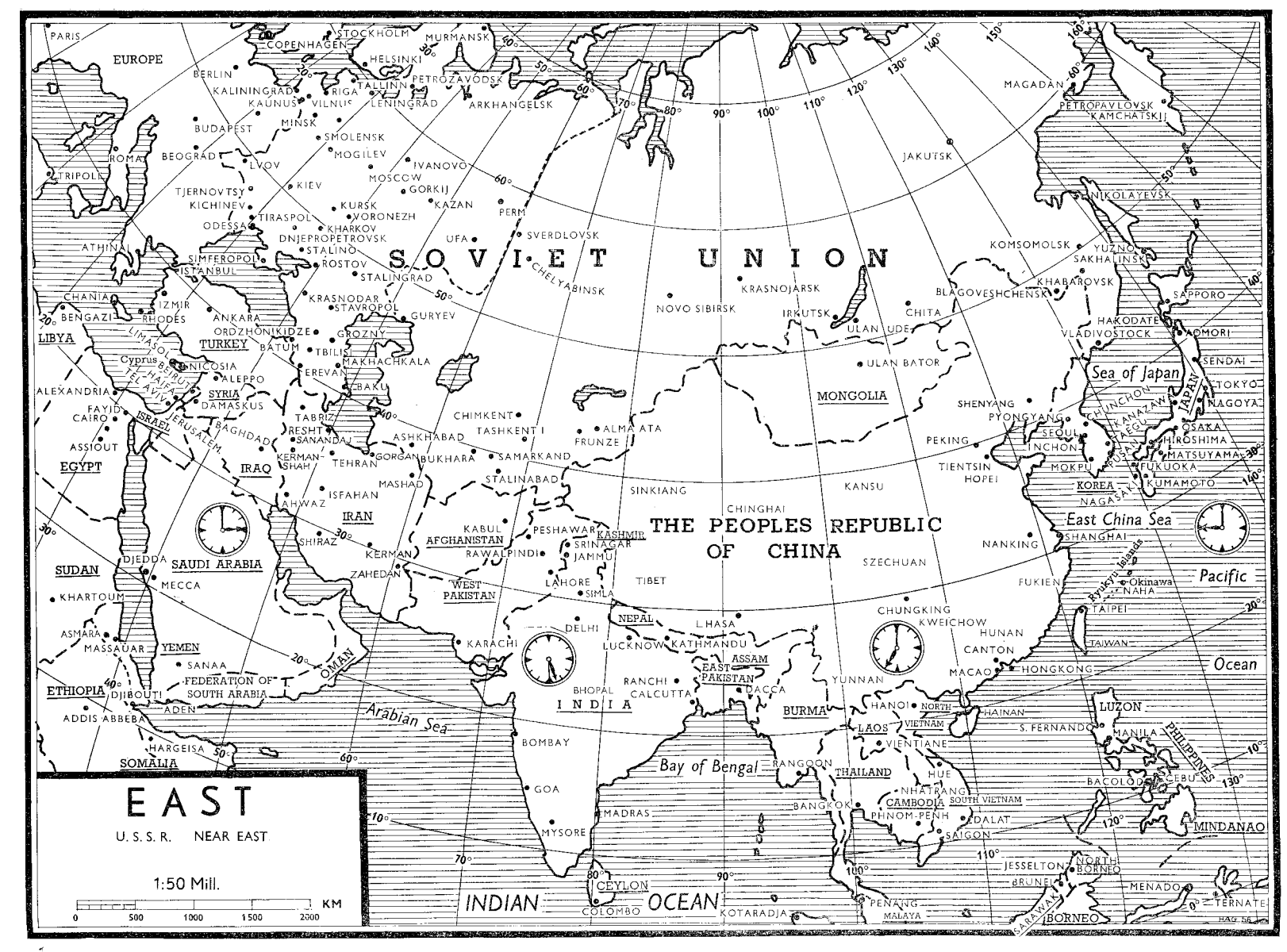
UGANDA

L.T: GMT+3 h – Pr.L: English, Luganda, Lwo, Ateso, Runyoro, Rutooro, Runyankore/Rukiga.
RADIO UGANDA (Go.)
AD: Limited adv. planned – ADDR: Ministry of Inf, Broadc. and Tourism, P.O. Box 142, Kampala. Cable: Radioad. Te: 3147 – L.P: Dir: A.G. Ridley. Contr. Prgr's: J. Kenyon. Chief Engineer: A. Stephenson.
STATIONS (System: Marconi): mw: 2/10kW, sw: 5/8kW.

kc	m	Netw.	kc	m	Netw.	kc	m	Netw.
584	514.0	Red	3340	89.81	Red	7110	42.19	Blue
656	457.3	Blue	4976	60.29	Red	7195	41.70	Red
728	412.0	Blue	5026	59.70	Blue			

HOME SCE: Red Network (Nat, No. Reg, Hindi prgr's): 03.45–05.45 (Sun 06.00), 14.15–22.02 on 584/3340/4976kc, 06.00(Sun 06.15)–14.00 (Sun 14.15) on 584/3340/7195kc – N. in English: 04.00, 05.00(Sun), 05.40(W), 09.00(W), 10.00(W), 10.15(Sun), 17.00, 18.00, 20.00, 21.00.
Blue Network (Nat, Midland & We. Reg. prgr's): 03.45–05.45(Sun 06.00), 14.15–22.02 on 728/5026kc, 06.00(Sun 06.15)–14.00 on 656/728/7110kc – N. in English: 04.00, 05.00(Sun), 05.40(W), 09.00(W), 09.15 (Sun), 10.00(W), 18.00, 20.00, 21.00.
ANN: E: "This is R. Uganda, Kampala". Luganda: "Eno ye R. Uganda, Kampala". Lwo: "Man en aye R. Uganda, Kampala". Rutooro: "Enu ni R. Uganda, Kampala". Ateso: "Ne nges R. Uganda, Kampala". Rukiga: "Egi ni R. Uganda, Kampala" – V. by QSL-card – Records accepted – F.PL: 3 channel transmissions.

Your help is needed . . .
to make the WRTH even better, and that is why we ask all of our readers—listeners and radio-stations—to send in corrections and new schedules, thus enabling us to offer you an **improved** WRTH 1966 . . .


EAST
U. S. S. R. NEAR EAST
1:50 Mill.
0 500 1000 1500 2000 KM
SOVIET UNION
THE PEOPLES REPUBLIC OF CHINA
INDIAN OCEAN
Arabian Sea
Bay of Bengal
Sea of Japan
East China Sea
Pacific Ocean
EUROPE
LIBYA
TURKEY
SYRIA
ISRAEL
IRAQ
IRAN
EGYPT
SUDAN
SAUDI ARABIA
YEMEN
ETHIOPIA
SOMALIA
OMAN
AFGHANISTAN
WEST PAKISTAN
KASHMIR
NEPAL
INDIA
EAST PAKISTAN
ASSAM
BURMA
THAILAND
LAOS
CAMBODIA
SOUTH VIETNAM
NORTH VIETNAM
MONGOLIA
KOREA
JAPAN
PHILIPPINES
LUZON
MINDANAO
BORNEO
CEYLON
MALAYA
SARAWAK
BRUNEI
NORTH BORNEO
SINKIANG
CHINGHAI
KANSU
SZECHUAN
TIBET
HOPEI
PEKING
TIENTSIN
SHANGHAI
NANKING
FUKIEN
CHUNGKING
KWEICHOW
HUNAN
CANTON
MACAO
HONGKONG
HAINAN
YUNNAN
HANOI
VIENTIANE
RANGOON
BANGKOK
PHNOM-PENH
SAIGON
DALAT
HUE
NHATRANG
PENANG
KOTARADJA
COLOMBO
MADRAS
MYSORE
GOA
BOMBAY
BHOPAL
RANCHI
CALCUTTA
DACCA
KATHMANDU
LUCKNOW
DELHI
KARACHI
LAHORE
SIMLA
RAWALPINDI
PESHAWAR
SRINAGAR
JAMMU
KABUL
KERMAN
ZAHEDAN
SHIRAZ
AHWAZ
ISFAHAN
MASHAD
TEHRAN
GORGAN
BUKHARA
SAMARKAND
STALINABAD
ASHKHABAD
TASHKENT
CHIMKENT
ALMA ATA
FRUNZE
TABRIZ
RESHT
SANANDAJ
KERMANSHAH
BAGHDAD
DAMASKUS
ALEPPO
NICOSIA
BEIRUT
TEL AVIV
HAIFA
JERUSALEM
LIMASOL
Cyprus
ALEXANDRIA
FAYID
CAIRO
ASSIOUT
KHARTOUM
ASMARA
MASSAUAR
SANAA
FEDERATION OF SOUTH ARABIA
ADEN
DJIBOUTI
ADDIS ABBEBA
HARGEISA
DJEDDA
MECCA
ATHINAI
CHANIA
BENGAZI
RHODES
IZMIR
ANKARA
ISTANBUL
SIMFEROPOL
ROSTOV
STALINO
DNJEPROPETROVSK
KHARKOV
VORONEZH
KURSK
KIEV
TIRASPOL
ODESSA
KICHINEV
TJERNOVTSY
LVOV
BEOGRAD
BUDAPEST
ROMA
TRIPOLI
PARIS
BERLIN
KALININGRAD
KAUNUS
VILNIUS
RIGA
TALLINN
LENINGRAD
MINSK
SMOLENSK
MOGILEV
MOSCOW
IVANOVO
GORKIJ
KAZAN
PERM
UFA
SVERDLOVSK
CHELYABINSK
STALINGRAD
KRASNODAR
STAVROPOL
GURYEV
GROZNY
TBILISI
MAKHACHKALA
EREVAN
BAKU
ORDZHONIKIDZE
BATUM
NICOSIA
STOCKHOLM
COPENHAGEN
HELSINKI
MURMANSK
PETROZAVODSK
ARKHANGELSK
NOVO SIBIRSK
KRASNOJARSK
IRKUTSK
ULAN UDE
CHITA
ULAN BATOR
JAKUTSK
MAGADAN
PETROPAVLOVSK KAMCHATSKIJ
NIKOLAYEVSK
KOMSOMOLSK
YUZNO SAKHALINSK
KHABAROVSK
BLAGOVESHCHENSK
SAPPORO
HAKODATE
VLADIVOSTOCK
AOMORI
SENDAI
TOKYO
NAGOYA
OSAKA
HIROSHIMA
MATSUYAMA
FUKUOKA
KUMAMOTO
NAGASAKI
KANAZAWA
CHUNCHON
SEOUL
INCHON
MOKPU
PUSAN
PYONGYANG
SHENYANG
TAIPEI
TAIWAN
Okinawa
NAHA
Ryukyu Islands
S. FERNANDO
MANILA
BACOLOD
CEBU
MENADO
TERNATE
PENANG
KOTARADJA
HAG 56

UPPER VOLTA (Republic)

L.T: GMT – Pr.L: French, Moré.

RADIO-TELEVISION DE HAUTE-VOLTA (Go.)

ADDR: B.P. 511, Ouagadougou. Cable: Radiovolta. Te: 2214 – L.P: Dir. Gen: R. Haillecourt. Dir. Tec: G. Demangeat. Dir. Prgr: R. Zongo.
STATIONS (System TRT): *=Reg. st.
1439kc 208.4m 1kW – 4815kc 61.31m 25kW – 6045kc 49.63m 4kW.
HOME SCE. in French, Vernaculars: W: 06.00–08.00, 12.00–14.00, 17.00–23.00; Sat: 06.00–08.00, 12.00–24.00; Sun: 07.00–23.00. N: French: 06.30(W), 07.45(W), 08.30(Sun), 12.05, 12.45, 19.10, 20.00, 22.25(W), 22.25(Sun) – Wrp: W: 12.40. Vernaculars: Peulh 17.45, Mossi 18.00, Dioula 18.11, Gourounsi 18.22, Gourmantsché 18.33, Lobi 18.44, Bobo 18.55, Senoufo 19.06.
Bodo-Dioulasso*: 1529kc 1kW: 17.00–19.00 (N. in Vernaculars).
ANN: "Ici Ouagadougou, Radiodiff. de la Haute-Volta émettant..." – INT-SIG: Folklore Music (Balafon) – V. by QSL-card or letter. Rp. Records accepted.

ZAMBIA

L.T: GMT+2 h – Pr.L: English, 7 African Vernaculars.

ZAMBIA BROADCASTING CORPORATION

(Indep. statutory body established by act of parliament).
FI: by state, license fees and adv. revenue – Fee: Radio & TV: £5, Radio £1 – ADDR: Broadcasting House. P.O. Box RW 15, Ridgeway, Lusaka. Cable: Broadcasts. Te: 7-2986 – L.P: Chmn. of the Board: Chief Mapanza. Dir. Gen: D.A. Lightfoot. Head of Prgr's A.T.B. Nkhata. Dir. Tec: A. Davis. Dir. News: R. Rudden. Dir. Adm: D.L. Brooking. Studio Mgr: A.S. Masiye.

STATIONS:	Medium Waves	Prgr.
Lusaka	962kc 312m 2kW	English (Nat)
Lusaka	698kc 430m 2kW	"A" Vernaculars
Ndola	1215kc 247m 1kW	English (Nat)
Kitwe	548kc 547m 20kW	English (Nat)
Kitwe	746kc 402m 20kW	"A" Vernaculars

Short Waves (Lusaka): *=not in operation, A=Vernaculars.

kc	m	kW	Prgr.	kc	m	kW	Prgr.
3270	91.75	10	English	6165	48.66	10	English
*3295	91.00	25		7220	41.55	10	"A"
3346	89.68	20	"A"	*7285	41.18	10	
*4829	62.00	15		*9570	31.35	2.5	
4911	61.08	2.5	English	*11822	25.37	2.5	
4965	60.42	10	"A"	*11882	25.52	2.5	
6060	49.50	20	"A"				

HOME SERVICE: National Prgr. (English):
W. 03.55–06.30 on 3270/4911kc, 06.30–09.30 on 4911/6165kc, 09.30–12.00(Sat 15.00) on 6165kc, 15.00–17.30 on 4911kc, 17.30–21.05(Sat 22.05) on 3270kc.
N: 04.00 (W), 05.00 (W), 06.00, 09.00 (Sun), 10.15 (W), 11.00, 16.00, 18.00, 20.00, 21.00 (W) – Wrp: 04.10 (W), 05.10 (W), 05.55 (Sun), 17.50 (W), 17.55 (Sun).
Prgr. "A" (Vernacular): 03.55–06.12 (W) on 3346/4965kc, 06.12 (Sun 06.00)–07.00 on 4965kc, 07.00–09.30 on 4965/6060kc, 09.30–09.45 on 6060kc, 09.45–14.30 on 6060/7220kc, 14.30–15.45 on 4965/6060kc, 15.45–16.00 on 4965kc, 16.00–21.05 (Sun 20.05) on 3346/4965kc – N: English: as for Nat. Prgr. – Vernaculars: W. 10.45, 10.50, 11.15, 11.20, 11.25, 11.30, 11.35, 16.00, 16.15, 16.20, 16.25, 16.30, 16.35, 16.40.

ANN: English: "This is the Zambia Broadc. Corpo". "This is the National Sce of the Zambia-Broadc. Corpo". – "This is the Zambia-Broadc. Corpo. (Vernacular) "A" Prgr" – OPENING-SIG: Cry of the Fish Eagle – V. by QSL-card. – F.PL: Livingstone 596kc and Broken Hill 650kc (both 2kW) January 65; FM (Lusaka) 3kW at the end of 1964. 50kW sw-tr for educ. prgr's. during 65/66.

Wilhelm Franz KG, Germany, delivered EMT studio equipment.

ZANZIBAR

L.T: GMT+3 h – Pr.L: Kiswahili, Arabic, English.

ZANZIBAR BROADCASTING SERVICE (Go.)

FI: Go. Maintained – ADDR: P.O. Box 1178, Zanzibar. Cable: Broadcasting. Te: 2128 – L.P: Dir: Y. M. Yusuf. Dir. Tec: N. J. A. Frigout.
STATIONS: 600kc 500m 0.25kW – 4795kc 62.54m 0.25kW – 3339kc 89.80m 0.25kW – 6005kc 49.96m 3.5kW.
HOME SCE. in Kiswahili (occ. items in English, Arabic, Indian) on 600/6005kc: D 10.25–11.30, 13.30–16.30 – N: 13.45, 16.15 – Arabic: Fri 14.00–14.30.
ANN: Swahili: "Hiifni Sauti ya Unguja" – Arabic: "Hadha Saut Zinjibar" – E: "This is Zanzibar calling on..." – INT-SIG: Musical Chords.

ADEN (Federation of South Arabia)

L.T: GMT+3 h – Pr.L: Arabic, English.

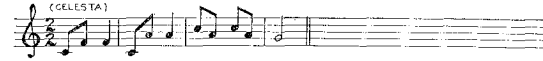
SOUTH ARABIAN BROADCASTING SERVICE

(Go, soon comm. public corpo.)
ADDR: P.O. Box 1264, G.P.O. Aden. Cable: Broadcasts. Te: 4874 – L.P: Dir. Tec: D. A. Import. Dir. Prgr: H. Safi. Sales Mgr: R. Bliss.
STATIONS: 755kc 397m 50kW – 785kc 382.2m 5kW
5060kc 59.29m 7.5kW d.
HOME SCE. in Arabic: D exc. Fri 03.30–06.00, 12.00–19.30, Fri 03.30–19.30 – N: 03.55, 04.45, 06.45 (Fri 11.00), 13.00, 15.00, 17.00, 19.00 – ANN: "Idha'at at Gamut al Arabi" or "Huna Ad'n" – V. by QSL-card or letter. Rp. preferred. Re. wanted from Arabic speaking countries only – PUB: Prgr.schedule free.

The Marconi Company Ltd, G.B, delivered 1×5kW mw-tr, 1×7.5kW sw-tr. Wilh. Franz KG, Germany: EMT studio equip.

BRITISH FORCES BROADCASTING SERVICE, ADEN

ADDR: Steamer Point BFPO 69, Aden – L.P: Dir: P. Buckle. Dir. Tec: J.M. Campbell.
STATION: 1241kc 242m 10kW.
HOME SCE. in English: W 02.45-05.15, 09.45–20.10 (Sat 21.00), Sun 04.00–20.10. N (BBC-GOS): 04.00, 05.00, 06.00, 11.00, 13.00, 16.00, 18.00, 20.00. – INT-SIG: Seven second theme based on "The Waltzing Bugle Boy" (Celeste) rep. after 10 sec. pause.
V. by letter (Rp. only).



ADEN FORCES BROADCASTING ASSOCIATION (Comm, with voluntary staff)

FI: by adv – ADDR: Royal Air Force, Khormaksar, Aden – L.P: Dir. Tec: Sqn. Ldr. A. Jackson.
STATION: 930kc 1kW – HOME SCE in English: Mon-Fri 05.20–09.35 & 12.55–20.10, Sat 05.20–23.00, Sun 06.55–20.20. N. (relay BBC/GOS): 09.15, 13.00, 18.00, 20.00 – ANN: "This is the Aden Forces Broadc. Association".

AFGHANISTAN

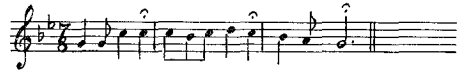
L.T: GMT+4 ½ h – Pr.L: Pushto, Persian.

AFGHAN BROADCASTING SYSTEM (Go.)

ADDR: Radio Afghanistan, Ansari Wat, Kabul. Cable: Techrad. Te: 24585 – L.P: Prgr. Div: Dr. M. Habibi. Dir. Techn. Div. Eng: M.K. Atai.
STATIONS: mw 20kW, sw 50kW.

kc	m	kc	m	kc	m
660	454.5	4775	62.84	15125	19.83
3985	75.28	9635	31.14	15225	19.70

HOME SCE'S: 02.30–04.30, 07.30–09.00 on 660/3985kc, 11.30–13.30, 14.30–17.30 on 660/3985/4775kc.
FOREIGN SERVICE: English: 10.30–11.00 to F. East on 15225kc, 11.00–11.30 to So. Ea. Asia, Indonesia on 15125kc, 14.00–14.30 to Near East on 4775kc – Urdu: 13.30–14.00 on 4775kc – Russian: 17.30–18.00 on 4775kc – Arabic: 18.00–18.30 on 9635kc – German: 18.30–19.00 to Europe on 9635kc – French: 19.00–19.30 to Europe on 9635kc. During Summer period 9635kc will be replaced by 15225kc (18.00–19.30) – ANN: Pushto: "Da Afghanistan Kabul Dai" – INT-SIG: A record on national flute – V. by QSL-card – Records accepted.



F.PL: 100kW mw+sw August 66.

Wilhelm Franz KG, Germany, delivered EMT studio equip.

WANTED
Sales Representatives to sell advertising in countries where we are not now represented.
For details, write:
World Radio TV Handbook Co. Ltd.
Sundvej 6, Hellerup, Denmark.

BAHRAIN

L.T: GMT+4 h – Pr.L: Arabic.

BAHRAIN BROADCASTING STATION (Go.)
ADDR: P.O. Box 253, Manama, Bahrain, Arabian Gulf. Te: 8278 – L.P: Dir. of Broadc: I. Kanoo. Dir. Tec: S.A. Khan.
STATION: 610kc 491.8m 2kW.
HOME SCE. in Arabic: D. 05.30 (Fri 04.00)–08.00, 16.00–19.30. N: 07.55, 17.30 – Wrp: 17.45.
ANN: Arabic: "Hunal Bahrain" (This is Bahrain) – INT-SIG: Local composition of guitar and violin – V. by letter PUB: "Hunal Bahrain" monthly, free on request – F.PL: Power 4kW; 10kW sw-tr.

BRUNEI (British Protected State)

L.T: GMT+8 h – Pr.L: Malay, English, Chinese.

RADIO BRUNEI (Go.)
ADDR: Dept. of Broadc. & Inf, Brunei. Cable: Infoff. Te: 345 – L.P: Dir. of Broadc. & Inf: Md. S. Abd. Kadir (Ag). Ag. Dep. Dir: Pgn. H.P.b. Pgn. H. Rajid. Chief Eng: M.K.O. Chen. Press Officer: M. bin Yussof.
STATIONS: 970kc 1.2kW – 1240kc 20kW – FM: 89.5Mc 0.015kW – *895kc 0.66kW – 4865kc 61.66m 10kW.*
HOME SCE: 22.30–06.00 on 970/1240kc+FM, 08.00–14.30 on 895/970/1240/4865kc+FM.
Malay: 22.30–01.00, 04.30–06.00, 10.15–13.00, 13.00–14.30 (970kc only) – Chinese: 01.00–03.00, 09.00–10.15 – English: 03.00–04.30, 13.00–14.30 (895/1240/4865kc) – 08.00–09.00 Forces Prgr (English & Gurkhali).
ANN: English: "This is R. Brunei". Malay: "Inilah R. Brunei" – INT-SIG: Station opens with the sound of Native Tune preceeded by TS – V. by QSL-card or letter (for sw. only). Re. to Chief Eng. Records accepted – F.PL: 10kW mw-tr. under constr. on 895kc to replace 0.66kW tr. Will operate before the end of 1964 – PUB: "Suara Brunei" (Voice of Brunei).

The Marconi Company, Ltd, G.B. delivered mw-tr's: 1×20, 1×2kW, 1×660W, studio equip., Gates Radio Co, USA: 2×10kW.

BURMA

L.T: GMT+6½ h – Pr.L: Burmese, English.

BURMA BROADCASTING SERVICE (Go.)
ADDR: Prome Rd, Kamayut P.O, Rangoon. Cable: Burbrocast. Te: 31355 – L.P: Dir: Major K. Sunn. Dir. Tec: U. Win Mg, M.I.R.E.

STATIONS (System RCA):

Call	kc	m	kW	Call	kc	m	kW
XZK	955[1]	314.0	50	XZK3	6035[1]	49.71	50
XZK8	1150[2]	261.0	5	XZK4	7120[1]	42.13	50
XZK2	4795[2]	62.57	50				

FM: 100/102/104/106Mc 0.25kW – [1] Prgr. I. [2] Prgr. II.

HOME SCE: Prgr. I: Burmese: 00.30–01.30 on 955/6035kc, 04.30–07.00 on 955/7120kc, 11.00–14.30 on 955/6035kc – N: 01.00, 06.30, 13.30 – Wrp: 13.28 – Folklore Music: Mon, Wed, Fri 13.45.
English: 01.30–02.30 on 955/6035kc, 07.00–07.30 on 955/7120kc, 14.30–16.30 on 955/6035kc. N: 02.00, 07.00, 14.45 – Mbg: Wed, Fri 14.30, Sun 02.10 – L.L: Wed 14.15.
Hindustani: 02.30–02.45 on 955/6035kc. N: 02.37 (W).
Prgr II. (Burmese): 11.00–14.45 on 1150/4795kc.
ANN: E: "This is the Burma Broadc. Service". Burmese: "Myanma Athan Hma Athan Hlwint Nay Barthe" – INT-SIG: Burmese Orchestral Music – V. by QSL-card. Rp.

CAMBODIA

L.T: GMT+7 h – Pr.L: Cambodian, French.

RADIODIFFUSION NATIONALE KHMÈRE (RNK-Go.)
AD: D. 00.00–01.30 – ADDR: 28 Ave Preah Mohaksatryany Kossomak, Phnom Penh. Te: 3958. Cable: Miformation – L.P: St. Dir: V. Peng Kith. Dep. Dir. & Dir. Prgr: L. Saingvar. Dir. Tec: E. Samkech.
STATIONS: 1410kc 213.0m 20kW – 6090kc 49.26m 15kW – 9695kc 30.94m 50kW – 11940kc 25.13m 50kW – 17710kc 16.94m 50kW (provisionally).
HOME SCE. on 1410/6090kc: 22.30–17.00. N: Cambodian: 23.00, 05.00, 07.00, 10.00, 12.00, 14.00. French: 23.15, 05.15, 12.30.
English: 05.30, 12.45 – Wrp: 13.00 – L.L. (English): Tues, Fri. 05.45–06.00.
FOREIGN SCE: 01.30–02.30 on 17710kc, 03.00–04.00 on 11940kc, 05.30–06.00 on 6090kc, 13.00–15.00 on 9695kc.
ANN: F: "Ici Phnom-Penh, Radiodiff. Nationale Khmère". E: "This is Phnom-Penh the Voice of Cambodia" – V. by letter.

CEYLON

L.T: GMT+5½ h – Pr.L: English, Sinhalese, Tamil.

RADIO CEYLON (Go, Comm.)
FI: By state, licenses, adv's – ADDR: Dept. of Broadc. P.O. Box 574, Colombo 7. Cable: Radceylon. Te: 91234 – L.P: Dir. Gen: S. B. Senanayake.

STATIONS:

kc	m	kW	kc	m	kW	kc	m	kW
540	555.5	0.25	4900	61.22	10	6185	48.50	10
640	469.0	0.25	4968	60.38	10	7190	41.71	10
700	428.0	15	5020	59.76	10	9667	31.03	100
870	344.8	0.25	5065	59.19	10	9720	30.86	35
920	326.0	10	6005	49.96	10	11800	25.42	35
1030	294.0	20	6075	49.38	10	15205	19.07	35
4870	61.60	10	6130	48.94	10	15333	19.57	100
						17830	16.83	35

NATIONAL SERVICE
English: D 11.30–17.30 on 920/5020kc. Sun 04.30–07.30 on 920/6185 kc – N, Wrp: W: 12.45, 15.30. Christian Half hour: Sun 13.30.
Sinhalese: D 01.00–03.00, 11.00(Sun 10.30)–17.00 on 700/4900kc, 06.30(Sun 03.00)–08.00 on 700/6075kc, N: 01.45, 07.15. Sandya Sevaya: 18.30–21.30 on 1030/5065kc.
Tamil: 01.15–03.00, 11.30–17.00 on 870/4968kc, 06.30(Sun 03.00)–08.00 on 870/6005kc.

ANN: E: "This is the National Sce. of R. Ceylon". Tamil: "Illankai Vanoli – Thesiya Oliparappu". Sinhalese: "Me Lanka Guwan Viduliye Suwadeshiya Sevayai". "Me Lanka Guwan Viduliye Sandya Sevayai" – INT-SIG: All four sce's open with "National Drums" ("Magul Bera") and followed by "Jaya Mangala Gatha" and close with National Anthem ("Sri Lanka Matha").

EXTERNAL SERVICES in English:
To Europe, No. Africa and M. East: 07.00–08.15 on 15333kc.
To So. Ea. Asia: 09.15–10.30 on 17820kc. N. in English: 07.20, 09.35.
ANN: "This is the External Sce. of R. Ceylon broadc. to listeners in.."

COMMERCIAL SERVICE
To Ceylon in English, Sinhalese, Tamil:
Sinhalese: 01.30–03.00 on 640/4870kc, 03.00–07.30 on 640/6005kc, 07.30–10.30 on 920/6185kc (Sun on 640/6005kc), 10.30–11.30 on 920/5020kc. N: D: 01.45, 07.15 – Tamil: 04.30–05.30, 09.30–10.30 on 640/6005kc, 10.30–12.30 on 640/4870kc.
English: 01.30–03.00 on 920/5020kc, 03.00–04.30 on 920/6185kc, 07.30–09.30 on 640/6130kc (Sat/Sun 07.30–10.30 on 920/6185kc), 10.30–11.30 on 920/5020kc, 12.30–17.30 on 640/4870kc. N: D: 02.00, 07.45, 12.45.
To Asia in English, Hindi, Tamil:
English: 01.30–03.30(Sun 04.30) on 9667/15205kc, 12.30–16.45 on 9667kc – N: 02.00, 13.00(BBC).
Hindi, Tamil: 01.30–04.30(Sun 07.30) on 7190/9720/11800kc, 11.00 (Sun 10.30)–17.30 on 6075/9720/11800kc.

ANN: E: "This is the Comm. Sce. of R. Ceylon". Sinhalese: "Me Landa Velanda Guwan Viduli Sewayai". Tamil: "Illankai Vanoli Varthaga Oliparappu". Hindi: "Yeh R. Ceylon Ka Vyapaar Vibhag Hai" – INT-SIG: *Opens and closes with an oriental folk theme* – Gajaga Vannama – V. by QSL-card or letter. Re. in E. to be addressed to Listener Research Officer. Records accepted – PUB: R. Times (fortnightly).

VOICE OF AMERICA RADIO STATION IN CEYLON

ADDR: Voice of America, Washington 25, D.C. USA.

STATIONS: Colombo 35kW: 01.00–03.30, 12.00–18.00, 18.30–19.00.
7110 kc 42.19 m 11835 kc 25.35 m 15285 kc 19.63 m
7275 – 41.24 – 11920 – 25.17 – 15415 – 19.46 –
01.00–03.30 on 7275/11835kc, 12.00–18.00 on 7110/11835/15415kc, 18.30–19.00 on 11920/15285kc.

English: 01.00–03.30, 12.00–15.30, 16.00–18.00. We. Bengali: 13.30–14.00 on 11835/15415kc. Tamil: 14.00–14.30 on 7110/11835kc. Ea. Bengali: 14.30–15.00 on 7110/11835kc. Urdu: 15.00–15.30 on 11835kc, 16.00–16.30 on 11835/15415kc. Hindi: 15.30–16.00 on 11835/15415kc. Hindi (to Ea. Africa): 18.30–19.00 on 11920/15285kc.

ANN: "This is Colombo relaying Voice of America Programs" – INT-SIG: Choir of brass playing a 10 note version of "Colombia the Gem of the Ocean". See USA – V. by QSL-card.

THE PEOPLE'S REPUBLIC OF CHINA

L.T: GMT+8 h – (Urumchi: GMT+6 h) – Pr.L: Chinese.

BROADCASTING ADMINISTRATION (Go.)
ADDR: Broadc. Adm, Fu Hsin Men, Peking – L.P: Dir. Gen: M. Yi. Dir. International Liaison Dept: F. Chiung.

HOME SERVICE

CENTRAL PEOPLE'S BROADC. STATION:

Medium Waves:

kc	kc	kc	kc	kc	kc	kc	kc	kc	kc	kc	kc
540	610	690	760	820	910	1000	1050	1150	1250	1350	1470
560	630	710	780	830	960	1010	1070	1160	1280	1370	1480
570	640	720	790	850	970	1020	1090	1210	1290	1400	1500
590	660	730	810	890	980	1030	1140	1230	1330	1450	1510
600	680	750									

Short Waves:

kc	m	kc	m	kc	m	kc	m	kc	m
3225	93.05	6212	48.29	9020	33.26	11290	26.57	15300	19.61
3290	91.90	6225	48.19	9064	33.09	11330	26.47	15313	19.59
3390	88.50	6595	45.48	9170	32.70	11455	26.19	15445	19.43
3830	78.33	6790	44.18	9340	32.12	11515	26.05	15480	19.38
3860	77.44	6810	44.05	9570	31.35	11630	25.79	15550	19.29
3915	76.63	6890	43.54	9620	31.19	11660	25.73	15590	19.24
3985	75.28	6995	42.89	9670	31.02	11675	25.70	15610	19.22
4250	70.59	7065	42.46	9710	30.90	11690	25.66	15710	19.10
4460	67.26	7100	42.45	9717	30.88	11725	25.59	15880	18.89
4500	66.67	7170	41.84	9735	30.82	11860	25.30	17450	17.19
5075	59.13	7195	41.70	9765	30.72	11910	25.19	17490	17.15
5125	58.54	7240	41.44	9860	30.42	11925	25.16	17533	17.11
5320	56.39	7265	41.29	9920	30.24	11935	25.14	17605	17.04
5535	54.10	7305	41.07	9945	30.17	15030	19.96	17635	17.01
5915	50.72	7370	40.71	9972	30.08	15175	19.77	17780	16.87
6065	49.46	7500	40.00	10260	29.24	15240	19.69	17880	16.78
6100	49.18	7620	39.37	11100	27.03	15290	19.62	17900	16.76
6155	48.74								

D.PRGR'S: No information available.

LOCAL STATIONS

Name	kc	Name	kc
Peking	820, 1210, 1350, 1480	Kannan	1330
		Yumen	1310
Shanghai	850, 990, 1070, 1110, 1210, 1300, 1500	Ninghsia	1130, 1290
		Chinghai	800, 1250, **6260, 6500, 9500**
Hopei	780, 850, 910, 1080, 1280, 1330, 1440, 1470	**Singkiang**	550, 740, 910, **4220, 4500, 4770, 6280, 7050, 7385, 9470, 10245**
Tientsin	870, 950, 1070, 1390	**Shantung**	920, 1110, 1450, **2350**
Chinhuangtao	1370		
Schichiachuang	1050	Tsinan	1310
Tangshan	810, 1450	Tsingtao	850, 1380
Shansi	1100, 1370, 1490, 1590, 1530	Kiangsu	700
		Nanking	870
Inner Mongolia A	960, 1460, **3970, 4068, 6840, 6974, 9365, 9472, 11040**	Hsuchow	1450
		Nantung	1440
		Wusih	1400
		Anhwei	940, 1490
Inner Mongolia B	1070, 1360, **3900, 4000**	**Chekiang**	800, 820, 960, 1350, 1370, **2475**
		Chowshan	680
Bayinor	1270, **4000**	Ningpo	1470
Chaowut	1580	Wenchow	1570
Chirim	1350	**Fukien**	860, 880, 930, 950, 1210, 1250, 1430, 1560, **2340**
Paotow	670		
Silingol	1310, **4525**		
Ulanchap	1540	Foochow	1330
Liaoning	218, 1240	Amoy	1110, 1200
Shenyang	690, 790, 1440	Honan	1420
Anshan	950, 1070	Hupeh	770
Antung	890	Wuhan	1050, 1370
Chingshow	1410	Hwangshih	1470
Fushin	1470	**Hunan**	1260, **4990**
Fushun	850	Hengyang	1350
Lushun-Dalien	690, 830	Kiangsi	840
Penhsi	1310	Kwangtung	1060, 1340
Yingkow	1090	Canton	790, 890, 1400
Kirin	580, 1130	Chankiang	1290
Changchun	1330, 1450	Hainan	950
Baicheng	1320	Swatow	1080
Kirinshi	930, 1600	**Kwangsi**	620, 1320, 1330, 1390, 1410, 1450, **5010, 5920**
Tunghua	910		
Yenpien	1050		
Heilungkiang	270, 620, 1110, 1410, 1530	**Kweichow**	930, 1030, **3260**
		Szechuan	1220, **7225**
Harbin	660, 970, 1400	Chengtu	750
Chianmuszu	670, 1590	Chungking	1080, 1310
Ichun	910	Tsukung	1490
Mutangkiang	680	**Yunnan**	820, 1380, **6937, 9990**
Tsitsihar	740		
Shensi	900, 1350, **6176**	**Tibet**	590, **4035, 5935, 9490**
Sian	680, 1370, 1490		
Kansu	860, **6155, 7324**		

FOREIGN SERVICE

Medium Waves: 1020kc 294m, 1040kc 289m, 1190kc 252m, 1300kc 231m, 1340kc 223.8m.

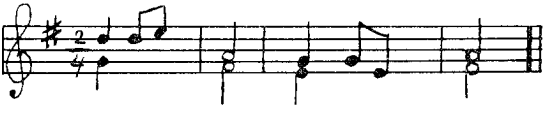
Short Waves:

kc	m	kc	m	kc	m	kc	m	kc	m
4020	74.63	6325	47.43	7350	40.82	9965	30.11	15140	19.82
4910	61.10	6345	47.28	7370	40.71	11445	26.21	15150	19.80
5075	59.11	6400	46.81	7450	40.27	11505	26.08	15190	19.75
5145	58.31	6825	43.96	7480	40.11	11650	25.75	15210	19.72
5860	51.20	6860	43.72	9457	31.73	11675	25.70	15220	19.71
5880	51.02	6890	43.54	9480	31.65	11685	25.67	15235	19.69
5915	50.71	6955	43.13	9490	31.61	11690	25.66	15250	19.67
5935	50.55	7035	42.64	9500	31.58	11715	25.61	15260	19.66
5950	50.42	7060	42.49	9510	31.55	11730	25.58	15270	19.65
5970	50.25	7065	42.46	9550	31.41	11740	25.55	15290	19.62
5985	50.13	7080	42.37	9555	31.40	11750	25.53	15345	19.55
5990	50.08	7095	42.28	9570	31.35	11780	25.47	15370	19.52
6000	50.00	7115	42.16	9585	31.30	11800	25.42	15417	19.46
6025	49.79	7125	42.11	9590	31.28	11820	25.38	15430	19.44
6035	49.71	7135	42.05	9595	31.27	11860	25.30	15500	19.35
6065	49.46	7150	41.96	9600	31.25	11885	25.24	15520	19.33
6080	49.34	7160	41.90	9650	31.09	11910	25.19	15670	19.15
6120	49.02	7180	41.78	9660	31.06	11945	25.12	17675	16.97
6125	48.98	7200	41.67	9665	31.04	11955	25.09	17680	16.97
6135	48.90	7205	41.67	9690	30.96	11965	25.07	17720	16.93
6145	48.82	7210	41.61	9755	30.76	11975	25.05	17730	16.92
6150	48.78	7230	41.49	9775	30.69	11980	25.04	17745	16.91
6155	48.74	7265	41.29	9785	30.66	12010	24.98	17765	16.89
6170	48.62	7270	41.27	9800	30.62	12055	24.88	17810	16.84
6180	48.54	7295	41.12	9860	30.43	15030	19.96	17835	16.82
6200	48.39	7300	41.09	9880	30.36	15060	19.92	17860	16.80
6210	48.31	7315	41.01	9900	30.30	15080	19.89	17885	16.78
6270	47.85	7325	40.96	9920	30.24	15095	19.87	17900	16.76
6290	47.70	7335	40.90	9945	30.17	15115	19.85		

D.PRGR'S: No information available.

ANN: E: "This is Radio Peking" – F: "Ici Radio Pekin" – G: "Hier ist Radio Pekin" – P: "Aqui Pequim" – R: "Govorit Pekin" – Sp: "Aqui Pekin".

INT-SIG: – **V.** by QSL-card or letter. Records accepted.



TAIWAN (Rep. of China)

L.T: GMT+8 h (Su: GMT+9 h) – **Pr.L:** Chinese.

BROADCASTING CORPORATION OF CHINA

(Priv. enterprise under Go. contract).

ADDR: New Park, Taipei. **Cable:** "Broadcast". **Te:** 37511 – **L.P:** Man. Dir: Jimmy Wei. Dir. Tec: K. S. Yeh.

STATIONS: Medium Waves:

Call	kc	kW	Call	kc	kW	Call	kc	kW
BED34	660	20	BED26	1040	1	BED63	1350	1
BED58	720	10	BED43	1060	1	BED23	1380	1
BED2	750	150	BED57	1070	10	BED65	1380	1
BED28	820	1	BED72	1120	0.5	BED87	1390	1
BED25	860	1	BED86	1160	1	BED54	1410	1
BED27	860	1	BED89	1160	1	BED80	1410	1
BED24	890	1	BED32	1190	1	BED48	1450	3.5
BED85	890	1	BED50	1200	100	BED82	1460	1
BED55	960	20	BED88	1200	1	BED81	1470	1
BED62	1000	50	BED79	1220	1	BED83	1500	1
BED53	1020	3.5	BED47	1280	1	BED78	1540	1

Short Waves:

Call	kc	m	kW	Call	kc	m	kW
BED59	3215	93.31	3.5	BED73	9685	30.98	50
BED31	3230	92.88	1	BED22	9690	30.96	10
BED20	3335	89.96	10	BED74	9755	30.76	25
BED67	3965	75.66	1	BED75	11725	25.59	25
BED30	5980	50.17	3.5	BED69	11825	25.37	25
BED9	6040	49.67	7.5	BED45	11860	25.30	25
BED29	6095	49.22	50	BED44	11905	25.20	3
BED92	7125	42.11	25	BED37	11970	25.06	3
BED7	7130	42.08	50	BED36	15280	19.63	3
BED35	7150	41.96	3	BED38	15320	19.58	3
BED21	7250	41.38	10	BED49	15345	19.55	3
BED51	7255	41.35	25	BED71	15395	19.49	25
BED41	9560	31.38	10	BED40	17890	16.77	50
BED33	9630	31.15	3				

China

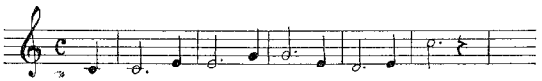
HOME SCE. in Chinese:
1st Net: 660kc 21.00–17.10 – 2nd Net: 960kc 21.00–22.00, 00.00–02.00, 03.55–16.00 – 3rd Net: 890kc 21.00–01.00, 04.00–15.00.
FOREIGN SCE: I=No. Am/Japan; II=So. Ea. Asia; III=Korea; IV=Japan/Korea; V=Australia/N.Z; VI=Tibet; VII=Madagascar; VIII=Middle East; IX=Africa.

Schedule (Nov 64–March 65)

Times	Languages	Areas	kc
02.50–03.50	English	I	6095, 11725, 11825 15345, 17890
04.00–04.30	Amoy	II	6095, 11725
04.30–05.00	Cantonese	II	11825, 15345
05.30–06.00	Chauchow	II	17890
06.00–06.30	Vietnamese	II	6095, 11725, 11825
06.00–06.30	Malayan	II	15345, 17890
09.25–09.55	Korean	III	6095, 11825
10.10–10.55	English	IV	6095, 11725
10.55–11.25	Japanese	IV	11825
11.30–12.00	Dragon Show	II+V	
12.00–12.30	Indonesian	II+V	6095, 11725, 17890
12.30–13.30	Mandarin	II+V	
13.35–13.50	Tibetan	VI	11725
13.30–14.00	Chauchow	II	
14.00–14.30	Hakka	II	6095, 7125
14.30–15.00	Cantonese	II	9755, 17890
15.00–15.30	Amoy	II	
15.30–16.10	English	II	
16.15–16.45	Arabic	VIII	7125, 9755
16.45–17.15	French	IX	7125, 9755
17.15–18.00	Cantonese	VII	7125, 7255, 9755

NEWS: English: 02.53–03.00, 03.23–03.30, 10.22–10.32, 15.42–15.52. **Japanese:** 11.03–11.15. **French:** 16.48–16.58.

ANN: Home Sce: "This is BCC the 1st (2nd, 3rd...) net. (in Chinese)". For Overseas: E: "This is the Voice of Free China (a call of freedom in Asia)".
INT-SIG:



V. by letter or QSL-card. Re. in English & Chinese. Records accepted.
PUB: Prgr.sched. free.

Advertisement.

BCC

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International Service
BROADCASTING CORPORATION OF CHINA
Taipei, Taiwan, Republic of China
for
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THE FAR EAST

Frequencies: 6095-Kc
7130-Kc
9720-Kc
11825-Kc
11860-Kc
15225-Kc
15345-Kc
15395-Kc
17785-Kc
17890-Kc

DEPARTMENT OF POSTS AND TELECOMMUNICATIONS

Ministry of Communications is a government authority responsible for determining power, frequency and supervising operations of all governmental and private radio and TV broadcasting stations.
ADDR: No. 2, Sec. 1, Changsha Street, Taipei. **Te:** 23901-523 – **L.P:** Dir: Y.S. Yu.

TAIWAN COMMERCIAL BROADC. STATIONS ASSOCIATION

ADDR: No. 15, Lane 1, Shuanyuan Street, Sanchung City, Taipei. **Te:** 972004 – **L.P:** Man. Dir: P. Shen.

CHENG SHENG BROADCASTING CORP. (Comm.)

ADDR: 433 Chungking North Rd, Sec. 3, Taipei. **Cable:** CSBCOD. **Te:** 48281 – **L.P:** Pres: Y. Lee. Gen. Mgr: S.H. Shia. Dir. Tec: G.D. Tue.
STATIONS:

	kc	kW		kc	kW		kc	kW
1) BEV34	820	1	3) BEV59	850	1	6) BEV60	1020	1
2) BEV35	1340	1	4) BEV36	1130	1	7) BEV37	1270	1
3) BEV58	1230	1	5) BEV72	930	1			

1) Cheng Sheng The First Dept, Taipei – 2) Cheng Sheng The Second Dept, Taipei – 3) BEV58: The Farmers Broadc. St, First Dept, Taichung. BEV59: The Farmers Broadc. St, Second Dept, Taichung – 4) Yun Lin Broadc. St, Yun-Lin – 5) Kung Yi Broadc. St, Chiayi – 6) Cheng Yen Broadc. St, Kaohsiung – 7) Cheng Tung St, Taitung.
HOME SCE: 1) 21.00–18.00 **N:** Mandarin: Every h on the h – **V.** by letter. Records accepted.

CHINA YOUTH BROADCASTING STATION (Go.)

ADDR: 131 Duen Huah Rd., Taipei.
STATIONS: BEG22 1150kc 3kW – BEG20 7180kc 41.78m 0.5kW.
HOME SCE. in Chinese: 21.00–01.00, 03.30–07.00, 09.30–15.30.
ANN: "This is the Voice of Youth" (in Chinese only) – **V.** by letter. Records accepted.

FU HSING BROADCASTING STATION (Go.)

ADDR: P.O. Box 799, Taipei. **Te:** 43126 – **L.P:** Dir. Gen: C. Kung. Dir. Tec: L. Lee.
HOME SCE. in Mandarin:
Taipei: 20.50–17.10 on 790/1090/1510kc (BEH4/6/8); 20.50–16.00 on 910kc (BEH5) – **Taichung:** 20.50–02.10, 02.50–06.10, 08.20–17.10 on 910/1090/590/1510kc (BEH32/33/34/35) – **Kaohsiung:** 20.50–02.05, 02.55–06.05, 08.25–17.05 on 590/910/1090/1510kc (BEH42/43/44/45) **Taitung:** 20.50–02.05, 02.55–06.00, 08.25–16.00 on 1090kc (BEH52) – **Hualien:** 20.50–01.30, 02.55–06.15, 08.25–17.00 on 1090kc (BEH56) – **Hsinchu:** 20.50–02.05, 03.50–06.05, 08.20–17.10 on 910/1090/1510kc (BEH62/63/64) – **Ilan:** 20.50–02.00, 02.55–06.00, 08.25–16.00 on 910kc (BEH53). All st's: 1kW – **V.** by letter.

POLICE BROADCASTING NETWORK (Go.)

ADDR: No. 1, Tientsin Str. Taipei. **Te:** 24761 – **L.P:** Dir. Gen: C. Y. Tuan. Dir. Prgr: H. C. Wang. Dir. Tec: J. H. Wang.
HOME SCE:

	Call	kc	m	kW	
Taipei	BEP22	1260	238	10	
–	BEP23	5960	50.34	1	
Hsinchu	BEP26	1120	267.8	1.5	W 21.15–07.00, 08.20–16.00.
Changwa	BEP24	680	441.2	1.5	Sun 23.30–17.00.
Kaohsiung	BEP25	1120	267.8	1.5	

ANN: "This is Police Broadc. St." (in Chinese only) – **V.** by letter.

MILITARY BROADCASTING STATIONS (Go.)

ADDR: Military Broadc. Corps, Ministry of National Defense, Taipei. The Military Broadc. Corps and The Air Force Broadc. St. are two different organizations. The first belongs to the Political Dept. and Ministry of National Defense, the latter to Headquarters of Chinese Air Force. They are without any relationship in their adm. and service.
L.P: Dir. Gen: Major Gen. C. H. Ho. Mgr: Lt. Col. K. Y. Ho. Dir. Tec: Lt. Col. C. C. Li.
STATIONS:

	Call	kc	m	kW		Call	kc	m	kW
1)	BEC22	1100	272	1.5	4)	BEC32	690	434.8	1.5
	BEC23	1520	197.4	3	5)	BEC33	1350	222.2	1.5
	BEC24	**7280**	**41.21**	**1.5**		**BEC34**	**7270**	**41.26**	**1.5**
2)	BEC25	700	428.6	3	6)	BEC35	770	389	0.5
	BEC26	**6090**	**49.26**	**3**		BEC36	1330	225.6	1.5
3)	BEC27	1290	232	1.5		**BEC37**	**5985**	**50.13**	**1.5**
	BEC28	**7240**	**41.44**	**1.5**	7)	BEC38	840	357.1	0.3
4)	BEC29	1250	240.0	1.5		BEC39	1490	201.34	3

1) No. 3 Section 1, Hsinyi Road, Taipei: 22.00–24.00, 03.00–07.00, 09.00–16.00 – **V.** by QSL-card – 2) Lanyealif, Shyhlin, Taipei: 22.00–03.00, 10.00–17.30 – 3) No. 3, Shyhfun Rd, Taichung: 22.00–03.00, 09.00–16.00 – 4) No. 101, Third Jengieng Rd, Kaohsiung – **V.** by QSL-card – 5) No. 38 Sanmin Str, Hualien: 22.00–24.00, 03.00–07.00, 09.00–17.00 – 6) No. 40, New Mingdertsuen, Tsoying: 22.00–24.00, 03.00–07.00, 09.00–17.00 – **V.** by QSL-card – 7) No. 14, Minsheng Rd Maagong, Penghwa.

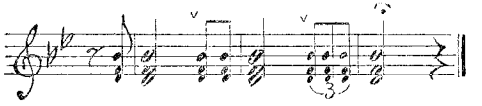
AIR FORCE BROADCASTING STATION (Military)

FI: By Go – **ADDR:** 1st and 2nd Dept: 44 Section 2, Jen Ai Rd, Taipei. **Te:** 28981 – **L.P:** Dir. Gen: S. H. Hu. Dir. Tec: C. S. Young.

STATIONS (System: RCA):

BEC70	980kc	306.1m	3.5kW		
BEC60	1440 –	208.3 –	1 –	BEC72	710kc 422.5m 1.5kW
BEC61	6105 –	49.14 –	7.5 – d	BEC71	7260 – 41.32 – 3.5 – d
				BEC62	9745 – 30.76 – 3.5 – d

HOME SCE. in Mandarin: 1st Dept. on 980/6105kc: 20.55–01.00, 03.55–06.30, 08.55–18.00. On 710kc (Tainan): 22.00–00.35, 03.55–06.00, 09.55–16.30 – N: 23.00, 05.00, 09.00, 12.00, 14.00 – **English:** 12.30–13.00. **English songs:** 04.00, 05.00, 09.00, 13.30, 14.00.
2nd Dept. (for China Mainland) on 1440/7260/9745kc: 20.55–24.00, 10.55–18.00. N: 21.00, 22.30, 12.00, 13.30, 15.00, 15.30, 17.00.
ANN: "Voice of Chinese Air Force" – **INT-SIG:** (2nd Dept.) Sign of Freedom – V. by QSL-card.



PUB: Prgr.schedule free on request – **F.PL:** Reg.st. at Taichung.

ARMED FORCES RADIO TAIWAN (U.S. Armed Forces)

ADDR: Box 13, APO63, San Francisco, California, USA. **Te:** 31375 or U.S. Military 4173 – **L.P:** Mgr: Lt. R. B. Howard, USN. Dir. Tec: R. W. Henning. Dir. Foreign Rel. & Prgr: G. Grow.
STATIONS: mw: 5kW, sw+FM: 1kW.
1560kc 192m – 3990kc 75.19m – 7215kc 41.58m – 100.1Mc
HOME SCE. in English: 24 h – N: every h on the h. Separate prgr. on FM 8–10 hrs daily.
ANN: "Armed Forces Radio Taiwan, in Taipei" followed by time ann – V. by QSL-card. Records accepted – **F.PL:** Relay st. at Taichung (0.1kW).

CYPRUS

L.T: GMT+2 h – **Pr.L:** Greek, Turkish.

CYPRUS BROADCASTING CORPORATION (Go, Comm.)

FI: Go. subsidised, Comm. adv. income – **AD:** 30 min. d – **ADDR:** P.O. Box 824, Nicosia. **Cable:** Broadcasts. **Te:** 5231 – **L.P:** Dir. Gen: V.I. Markides. Chief Eng: P.T. Astreos.

STATIONS:	kc	m	kW		kc	m	kW
Nicosia	606	495	20	Paphos	915	326	2
Nicosia	692	434	20	Limassol	1484	202.2	0.5

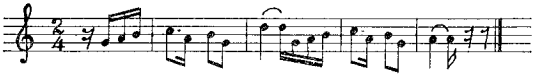
HOME SERVICE

GREEK on 692/915/1484kc: W: 05.00(Su 04.30)–07.00(Su 06.30), 10.00–11.45, 15.00–21.00. Sun: 05.00(Su 04.30)–11.45, 15.00–21.00 N: 05.30(Su 05.00), 11.30, 20.00.

TURKISH on 606kc: W: 05.00(Su. 04.30)–07.00(Su. 06.30), 10.00–11.45, 15.00–21.00. Sun: 05.00(Su. 04.30)–11.45, 15.00–21.00. N: 05.30(Su. 05.00), 11.30, 20.00.

ENGLISH on all freqs: D 11.45–13.00. N, **Wrp:** 12.00 – **T.S:** 6 pips before all Greek news.

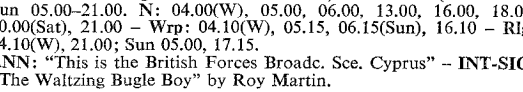
ANN: Greek: "Radiofonikon Idryma Kyprou". Turkish: "Burasi Kibris Radyo Yayin Korporasyonu" – **INT-SIG:** Avkoritissa played on Guitar – V. by letter. Records accepted.



The Marconi Company Ltd, G.B. delivered 3×20kW mw-tr's. Wilh. Franz KG, Germany: EMT studio equip.

BRITISH FORCES BROADCASTING SERVICE CYPRUS

FI: By State (Brit. Go.) – **ADDR:** B.F.P.O. 53, Cyprus – **L.P:** St. Contr: R. W. Morgan. Eng. in charge: J. Bull. Sen. Prgr-Organizer: Miss P. Livingstone.
STATIONS: Nicosia 1439kc 1kW, Limassol 1403kc 7.5kW, Akrotiri 92.1Mc 20kW, Dhekelia 99.6Mc 20kW.
D.PRGR'S in English: W: 03.45–07.00, 10.30–21.00(Sat 22.00); Sun 05.00–21.00. N: 04.00(W), 05.00, 06.00, 13.00, 16.00, 18.00, 20.00(Sat), 21.00 – **Wrp:** 04.10(W), 05.15, 06.15(Sun), 16.10 – **Rlg:** 04.10(W), 21.00; Sun 05.00, 17.15.
ANN: "This is the British Forces Broadc. Sce. Cyprus" – **INT-SIG:** "The Waltzing Bugle Boy" by Roy Martin.



Close down theme: "Evening Hymn and Last Post" – V. by QSL-card. Records accepted – **PUB:** Prgr.sched. free. Rp.

The Marconi Company Ltd, G.B. delivered 5kW tr. and studio equip.

BBC-EAST MEDITERRANEAN RELAY

Relays of the BBC Arabic Service and General Overseas Service (see page 116).

General Overseas Service only		kc
North Egypt, Jordan	03.00–06.30	1421
Israel, Lebanon, Syria	13.00–21.15	1421
Arabic Service		
Arabia	03.00–08.00	6120, 7140
	11.00–16.00	7140, 11720
	16.00–21.00	6120, 7140
Egypt, Jordan, No. Arabia	03.00–08.00	638, 719
	11.00–16.00	638, 719
Iraq, Syria, Cyrenaica	16.00–21.00	638, 719
Aden, Jordan, Libya, Syria	03.00–08.00	6120
	11.00–21.00	6120
Sudan, Egypt	03.00–08.00	9650
	11.00–21.00	9650
Iraq, Persian Gulf	03.00–08.00	7140
	11.00–16.00	7140, 11720
	17.00–21.00	7140
Iraq, Persian Gulf (Persian)	16.15–17.00	7140, 9690, 638

03.00–03.45**, 03.45–05.45*, 05.45–08.00**, 11.00–21.00*.
* Arabic. ** General Overseas Service.

HONG KONG (British)

L.T: GMT+8 h (Apr–Oct+9 h) – **Pr.L:** Chinese.

RADIO HONG KONG (Go.)

ADDR: Mercury House, P.O. Box 200, Hong Kong. **Cable:** Broadcasts. **Te:** 226822 – **L.P:** Dir. of Broadc: D. E. Brooks. Chief Eng: R. Winyard.
STATIONS: [1] Chinese sce. [2] English sce.
[1] 640kc 468.7m 2kW – [1] 3940kc 76.14m 2.5kW –
[2] 860kc 348.8m 2kW – [2] 91Mc 50kW – [2] 94Mc 50kW.
HOME SCE: English: 23.00–16.00 – N: 00.00, 05.15, 11.00 (BBC Newsreel), 15.00 – **Wrp:** 23.58, 10.58, 13.13, 14.58.
Chinese: 23.00–16.00 – N: 00.00, 05.30, 10.00, 12.00*, 12.30 – **Wrp:** 23.58, 05.28, 11.58, 15.30 – * Rel. Far Eastern st. from London.
ANN: English: "This is R. Hong Kong" – Chinese: "Ni do hai Heung Kong Kwong bor deen toy" – V. by QSL-card. Records accepted.

AKG, Austria, Ampex, UK, Marconi, UK: Studio Equipment – S.T.C. Marconi Co. G.B.: Tr's. – Wilh. Franz KG, Germany: EMT studio equip.

HONG KONG COMMERCIAL BROADCASTING CO.

FI: By adv – **ADDR:** P.O. Box 3000, Hong Kong. **Cable:** Radioads. **Te:** 236223 – **L.P:** Man. Dir: G. Ho. Dir. Tec: W. S. Ip.
STATIONS: 1050kc 286m 2kW: Cantonese – 1530kc 196m 2kW: English – 1232kc 243.2m 2kW: Cantonese.
HOME SCE. on all freq's: 23.00–16.00.
English: N: 00.00, 05.15, 10.00, 11.00, 12.00, 13.00, 14.00, 15.00 (Newsreel), 16.00 – **Wrp:** 00.10, 05.30, 08.30, 10.10, 12.15, 14.15, 16.00 – **Cantonese: Wrp:** 23.45, 00.00, 05.28, 12.30 (Sun), 13.30 (W), 15.00 – L.L: (English): W 23.30–23.45 – **ANN:** E: "Commercial Radio Hong Kong" – **INT-SIG:** Chimes – V. by letter. Records accepted.

SOUTH EAST ASIA RADIO VOICE (Rlg.)

FI: Operations are underwritten by protestant churches of the National Council of Churches in the US and by special gifts from the churches of the National Councils in the participating Asian countries.
ADDR: 191 Prince Edward Rd, Kowloon, Hong Kong. **Te:** 81-4759. **Cable:** "Searadio" – **Studios:** 10 Salemba, Djakarta IV/3, Indonesia; 82nd Street, Mandalay, Burma; 14 Pramuan, Bangkok, Thailand – **L.P:** Exec. Dir: Th. W. Lung (Ag). Chief Eng: B. Magdamo (DYSR, Philippines). Dir's: S. Lader (Burma), J. Haurissa (Indonesia), J. R. Sams (Thailand).
STATIONS: Dumaguete City, Philippines:
DYH5 9630kc 31.15m – DYH6 11875kc 25.26m – DYH7 15420kc 19.46m – DYH8 17715kc 16.93m – DYH9 21470kc 13.97m. Power: 75 or 100kW depending on operating freq.
D.PRGR'S: Tests scheduled to start early 1965, and regular broadc. by mid 1965 – V. by QSL-card. Reports to be sent to B. Magdamo, So.East Asia Radio Voice, Dumaguete City, Philippines. Records accepted.

REDIFFUSION (HONG KONG) LTD. A subsidiary of Rediff-Ltd. London (Comm.) – **FI:** By subscription charges and adv – **ADDR:** P.O. Box 121, Rediffusion Hse, Gloucester Rd. **Cable:** Re. diffuse. **Te:** 762211 – 3 simultaneous wired broadc. networks. Originating own prgr's, also relay R. Hong Kong, BBC, etc. D. 23.00–16.00.

INDIA

L.T: GMT+5½ h – **Pr.L:** Hindi, Marathi, Gujarati, Oriya, Bengali, Assamese, Tamil, Telugu, Urdu, Kannada, Kashmiri, Sanskrit, Dogri, Sindhi, Punjabi, Malayalam, English.

ALL INDIA RADIO (Go.)

ADDR: Directorate General, Akashvani Bhavan, Parliament, Str. New Delhi 1. **Cable:** Airgeneral. **Te:** 30101 – **L.P:** Dir. Gen: B. P. Bhatt. Dept. Dir. Gen. (Prgr): K. S. Mullick. Dir. Prgr: Miss M. Masani. Dep. Dir. Gen. (Adm): S. Parnameshwaran. Dep. Dir. Gen. (Inspection): A. K. Sen. Chief Eng: M. L. Sastri. Dir. News Sce: M. V. Desai. Dir. External Sce: H. R. Luthra. Dir. Staff Training: B. S. Anand. Dir. TV Center: R. Chander.

STATIONS: Medium Waves:

North Regional	kc	m		kc	m
Delhi A	810	370.4	Hyderabad C	1220	245.9
Delhi B	1070	280.4	Bangalore A	610	491.8
Delhi C	1370	219.0	Bangalore B	820	365.9
Lucknow A	760	394.7	Dhawar	1360	220.6
Lucknow C	1320	227.3	Vishakhapatnam	930	322.6
Allahabad	950	315.8	Cuddapah	1190	25.21
Patna A	620	483.9	**West Regional**		
Patna B	1500	200.0	Bombay A	1040	288.5
Jullundur	710	422.5	Bombay B	550	545.5
Jaipur A	1480	202.7	Bombay C	1230	243.9
Jaipur B	1290	232.6	Nagpur A	590	508.5
Ajmer	600	500.0	Nagpur B	660	434.5
Indore A	650	461.5	Ahmedabad	850	352.9
Indore B	1590	188.7	Baroda	850	352.9
Bhopal	1520	197.4	Poona A	780	384.6
Ranchi	560	535.7	Poona B	970	309.5
Varanasi	1240	241.9	Rajkot A	910	329.7
Bikaner	1330	225.6	Rajkot B	1420	211.3
Kanpur	1440	206.9	Panjim (Goa)	880	340.9
Raipur	980	306.1	Sangli	1250	240.0
Gwalior	1390	215.8	**East Regional**		
South Regional			Calcutta A	670	447.8
Madras A	720	416.7	Calcutta B	1000	300.0
Madras B	1420	211.3	Calcutta C	1540	194.8
Madras C	1550	193.5	Cuttack A	965	310.9
Tiruchi A	940	319.1	Cuttack B	1350	222.2
Tiruchi B	1480	202.7	Gauhati A	730	411.0
Tirunelveli	1200	250.0	Kohima	1490	201.3
Vijayawada A	840	357.1	Sambalpur	860	348.8
Vijayawada B	1500	200.0	Siliguri	1560	192.3
Trivandrum	660	454.5	Port Blair	1440	208.3
Calicut	680	411.2	Imphal	1390	215.8
Trichur	580	517.2	Jeypore	1460	205.5
Hyderabad A	740	405.4			

Short Waves: Delhi VUD: 10/20/100kW:

kc	m	kc	m	kc	m	kc	m	kc	m
3295	91.05	6145	48.82	7260	41.32	9730	30.83	15130	19.83
3365	89.15	6150	48.78	7290	41.15	9765	30.72	15165	19.78
3905	76.82	6180	48.54	9520	31.51	9915	30.26	15170	19.78
3925	76.43	6190	48.47	9530	31.48	10335	29.03	15185	19.76
4760	63.03	7105	42.22	9535	31.46	11710	25.62	15190	19.75
4960	60.48	7115	42.16	9575	31.33	11715	25.61	15225	19.70
4962	60.45	7125	41.11	9600	31.25	11740	25.55	15290	19.62
4990	60.12	7140	42.02	9575	31.33	11760	25.51	15310	19.60
5955	50.38	7155	41.93	9600	31.25	11770	25.49	17705	16.94
5975	50.21	7165	41.87	9615	31.20	11785	25.46	17715	16.93
5985	50.13	7170	41.84	9630	31.15	11810	25.40	17735	16.92
5990	50.08	7180	41.78	9665	31.04	11840	25.34	17760	16.89
5995	50.64	7195	41.70	9630	31.15	11850	25.43	17820	16.84
6040	49.67	7225	41.52	9665	31.04	11855	25.31	17830	16.83
6065	49.46	7235	41.47	9680	30.99	11895	25.22	17855	16.80
6130	48.94	7240	41.44	9690	30.96	11920	25.17	17890	16.77
6140	48.86	7255	41.35	9705	30.91	15105	19.86	21580	13.90

Lucknow (No. Reg. Sce) 10kW: 3205kc 93.60m – 4880kc 61.48m – 6170kc 48.62m. **Ranchi** (No. Reg. Sce) 2kW: 3268kc 91.80m. **Simla** (No. Reg. Sce) 2.5kW: 3223kc 93.09m – 4760kc 63.03m. **Bhopal** (No. Reg. Sce) 10kW: 3315kc 90.50m – 5990kc 50.08m. **Madras** (So. Reg. Sce) VUM – 4920kc 60.98m – 7160kc 41.90m. **Hyderabad** (So. Reg. Sce) 10kW: 3355kc 89.42m – 4990kc 60.12m – 7140kc 42.02m. **Bombay** (West Reg. Sce) VUB: 3295kc 91.05m – 4840kc 61.98m – 7120kc 42.13m. **Calcutta** (Ea. Reg. Sce) VUC: 3305kc 90.77m – 4820kc 62.24m – 6010kc 49.92m – 7210kc 41.61m. **Gauhati** (Ea. Reg. Sce) 10kW: 3235kc 92.74m – 3375kc 88.89m – 4940kc 60.73m – 6130kc 48.94m. **Kurseong** (Ea. Reg. Sce) 3355k 89.42m – 4895kc 61.29m – 6100kc 49.18m.

HOME SERVICES

NORTH REG. SCE. (Hindi, Punjabi, English):
Delhi A: 3365kc: Morning up to 02.15+Night. **4960kc:** Morning after 02.30. **6190kc:** Afternoon+Evening – **Lucknow: 3205kc:** Morning up to 02.15+Evening & Night. **4880kc:** After 02.30. **6170kc:** Afternoon – **Ranchi: 3268kc:** Evening+Night – **Simla: 3223kc:** Morning up to 03.30+Evening & Night. **4760kc:** Morning after 03.45 – **Bhopal: 3315kc:** Morning+Evening+Night. **5990kc:** Afternoon.

SOUTH REG. SCE. (Tamil, Telugu, Kannada, Malayalam, English):
Madras: 4920kc: Morning+Evening. **7160kc:** Afternoon – **Hyderabad: 3355kc:** Morning up to 02.15. **4990kc:** Morning after 02.30+Evening. **7140kc:** Afternoon.

WEST REG. SCE. (Gujarati, Marathi, Kannada, Hindi, English):
Bombay A: 7240kc: Sun 04.15–06.30 – **Bombay B: 3295kc:** Morning up to 02.15. **4840kc:** 02.30–04.00, Evening & Night. **7240kc:** Afternoon.

EAST REG. SCE. (Bengali, Oriya, Assamese, Hindi, English):
Calcutta B: 4820kc: Morning. **7210kc:** Afternoon 6010kc, Evening up to 12.40. **3305kc:** After 13.00+Night – **Gauhati: 3375kc:** Morning up to 01.45+Evening & Night. **4940kc:** After 02.00+Afternoon – **Gauhati B: 3235kc:** Morning+Evening & Night. **6130kc:** Afternoon – **Kurseong: 4895kc:** Morning. **6100kc:** Afternoon. **3355kc:** Evening & Night.

HOME NEWS in English (on shortwaves):
01.10–01.15: On 3365, 3905, 4960, 5990, 6040, 7105, 7125, 9705,kc (Delhi); **02.30–02.45:** On 3905, 4760, 5990, 7105, 7155, 9705, 9730, 11710, 15310, 17830kc (Delhi), 3223 (Simla), 3315 (Bhopal), 4920 (Madras), 4990 (Hyderabad), 4940 (Hyderabad), 4940 (Gauhati), 3345 (Jammu), 3277kc (Srinagar); **08.00–08.10:** On 6150, 6190, 7290, 9600, 9705, 11710, 11850, 15105, 15185, 17890kc (Delhi), 7160kc (Madras);
12.30–12.35: On 4960, 7165, 9535, 9630, 11855, 15290, 17820kc (Delhi), 4920kc (Madras);
15.30–15.45: On 3295, 3925, 4760, 4962, 5995, 6145, 7115, 7260, 9615, 10335kc (Delhi), 3268 (Ranchi), 3223 (Simla), 3315 (Bhopal), 4920 (Madras), 4990 (Hyderabad), 3375 (Gauhati), 3345 (Jammu), 3277 (Srinagar), 3355kc (Kurseong);
17.00–17.05(Sat 17.30–17.35): On 3365, 3925, 4760, 6145, 7115, 7160, 9615, 10335kc (Delhi).

ALL INDIA VARIETY PRGR. (Vividh Bharati): Short Wave Sce: 01.00–04.00 on 6035/6085kc, 05.30(Sun 04.45) – 07.00 on 7240/7260kc, 08.30–09.30(Sun 10.00) on 7260/9600kc, 10.30–12.45 on 7240kc, 13.00–17.00(Sat 17.30) on 6085/9635kc.

FORCES PRGR. (Hindi/Gorkhali): 13.00–14.00 on 1070/3365/4760kc
FOR NEFA: 02.15–02.30 on 7155/9705kc.

EXTERNAL SERVICES

GENERAL SERVICE (for Indian Overseas):

So. East Asia	L.	kc	N.
23.15–00.15	Hindi	3905/5985/9530/11710	23.20–23.30
00.15–01.15	Tamil	5985/9530/11710	00.20–00.30
11.30–12.30	Tamil	11720	
Ea. Africa Mauritius.			
03.45–04.15	Hindi	15130/17855	03.50–04.00
04.15–04.30	Gujarati	15130/17760	04.15–04.30
04.30–04.40	English	15130/17855	04.30–04.40
15.45–15.15	Swahili	11840/15105	
16.15–17.15	Hindi	11840/15105	
17.45–18.30	Gujarati	7180/9680/11815/11840	
18.30–18.40	Konkani	7180/9680/11815/11840	
18.40–18.30	English	7180/9680/11815/11840	
Fiji Islands			
07.00–08.00	Hindi	15290/17705	
EASTERN SERVICE			
Nepal			
01.30–02.15	Nepali	5955/7225	01.30–01.40
Burma			
00.40–01.15	Burmese	7225/9765	00.41–00.50
11.15–12.15	Burmese	11810/15105	11.16–11.25
Thailand			
11.40–12.00	Thai	17705/21580	11.45–11.55
China			
11.45–12.30	Cantonese	9665/7125	11.46–11.55
12.30–13.15	Kuoyu	9665/7125	12.31–12.40
North East Asia			
10.00–11.00	English	11770/15105/17855/9520	10.01–10.10
Australia, New Zealand			
10.00–11.00	English	15165/11710	10.01–10.10

Bhutan, Sikkim	L	kc	N
03.15–03.30	Tibetan	9705/7255	03.16–03.21
12.30–13.15	Tibetan	7290/9705	12.45–12.55
Indonesia			
22.45–23.00	Indonesian	7165/9530	22.50–23.00
08.45–09.45	Indonesian	15290/17715	08.46–08.55
East Asia			
11.15–11.30	French	17705/21580	11.16–11.25
South East Asia			
00.30–00.40	English	7225/9765/11785	00.30–00.40
13.30–15.00	English	11810/15225	13.31–13.40
WESTERN SERVICE			
Afghanistan			
02.45–03.00	Pushtu	6140/7195	02.50–03.00
14.45–15.30	Pushtu	3905	14.50–15.00
Iran			
03.45–04.00	Persian	11715/15190	03.50–04.00
16.15–17.15	Persian	7225/5955	16.16–16.26
West Asia			
05.00–05.30	Arabic	15170/17705/11760	05.05–05.15
17.30–18.30	Arabic	6180/9915/7170	17.45–17.55
18.45–19.30	French	6180/9915/7170	18.50–19.00
U.K, West Europe			
19.45–20.45	English	6130/7235/9915	19.46–19.55
West Africa			
19.45–20.45	English	7125/9690/11740	19.45–19.55

There will be changes in frequencies from time to time and listeners are advised to listen to announcements which will cover all such changes.

ANN: Home Sce: "This is All India Radio". **External Sce:** "This is Delhi calling in the External Services of All India Radio".

INT-SIG: All India Radio's signature is a melody of eight second's duration repeated with intervals of 10 seconds in between. The Instruments used are violin, cello and tampura.

V. by QSL-card – **PUB:** "India Calling" free of charge – prgr. journal in English. Requests for free supply of copies may be made either to the Dir. of External Services of All India Radio, New Delhi or through the Indian Diplomatic Mission concerned.

RADIO KASHMIR

Srinagar A: 1120kc 267.9m – **Srinagar B:** 4860kc 61.73m Afternoon; 3277kc 91.56m Morning+Evening and Night – **Jammu:** 990kc 303,0m: 02.00–03.30, 06.30–08.00, 13.00–17.30 – 3345kc 89.69m: Morning – 4950kc 60.61m: Afternoon – 3345kc 89.69m Evening.

The Marconi Company Ltd, G.B, delivered: 1 × 100kW tr. to Bombay, Delhi, Madras.
Brown Boveri, Switzerland, delivered: 20kW mw-tr's to Delhi, Madras, Vijyawada, Indore, Ajmer, Trichur, Patna; 50kW tr. (Trichy), 100kW tr. (Delhi).
Nippon Electric Co. Ltd, Japan, delivered 2 × 2kW sw-tr's. 20 × 1, 32 × 10, 1 × 50, 1 × 100kW mw-tr's.
Wilh. Franz KG, Germany: EMT studio equip.

INDONESIA

L.T: See Time Table – **Pr.L:** Indonesian.

RADIO REPUBLIK INDONESIA (Go.)

ADDR: P.O. Box 157, Djakarta. **Cable:** RRI. **Te:** GBR 5771 – **L.P:** Dir. Gen: Soekirman.

HOME SERVICES

Call	kc	m	kW
Djakarta (Java Central Station)			
–	2312	130.0	1
YDB	2460	121.95	1
YDD	3277	91.54	1
YDB2	4805	62.42	20
YDF	6045	49.63	100
–	7265	41.87	
YDF5	7220	41.55	100
YDB3	7270	41.26	7.5
YDB4	9770	30.71	20
YDE	11770	25.49	7.5
YDC	15150	19.80	7.5
–	17860	16.80	50
Bandung (W. Java)			
YDA2	2420	123.96	0.25
YDA	3205	93.60	10
YDA3	4945	60.67	10
Djember (E. Java: relay)			
YDI6	2330	128.74	1
–	3315	90.50	1
Medan (N. Sumatra)			
YDP2	3395	88.37	1
YDP	4930	60.85	
YDP4	5030	59.64	7.5
YDP3	7240	41.44	20
Sibolga (Sumatra: relay)			
YDM7	3241	92.56	1
Bandjarmasin (Kalimantan)			
YDO	3250	92.31	10
YDO2	5970	50.25	1
Pontianak (Kalimantan)			
YDW	2440	122.9	1
YDW2	3345	89.69	5

Advertisement

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POST BOX 500

NEW DELHI (INDIA)

DA 63/6

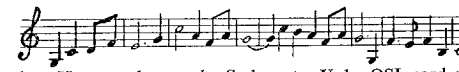
Call	kc	m	kW
Samarinda (Kalimantan: relay)			
YDY	3295	91.00	1
YDY2	6135	48.90	1
Jogjakarta (C. Java)			
YDJ2	7105	42.22	7.5
YDJ4	7255	41.35	20
Madiun (E. Java: relay)			
YDG6	3286	91.26	0.3
Semarang (C. Java)			
YDH	2490	120.48	1
YDH2	3935	76.24	5
YDH3	7210	41.16	5
Surabaja (E. Java)			
YDI	3975	75.78	10
YDI4	6120	49.02	1
Surakarta (C. Java)			
YDG	3232	92.82	10
Tjirebon (W. Java)			
YDA6	2390	125.5	1
Padang (S. Sumatra)			
YDL	2480	120.90	1
YDL2	3960	75.76	10
Palembang (S. Sumatra)			
YDK2	2430	123.50	1
YDK	4855	61.79	10
Bukittinggi (N. Sumatra)			
YDM	3232	92.82	0.3
YDM2	3305	90.77	0.3
YDM3	4910	61.10	0.3
Banda Atjeh (N. Sumatra)			
YDN	2390	125.50	1
Pakanbaru (N. Sumatra)			
–	4985	60.18	10
Makassar (Sulawesi)			
YDQ	2490	120.5	0.3
YDQ4	4750	63.16	7.5
YDQ3	7295	41.12	20
YDQ2	9550	31.41	20
Menado (Sulawesi)			
YDS2	5990	50.08	10
YDS	9550	31.41	1
Gorontalo (Sulawesi)			
YDS21	3395	88.37	1
YDS	4900	61.22	1
Denpassar (Bali)			
YDU2	3241	92.56	1
–	3295	91.00	1
YDU2	3945	76.05	10
YDU	4840	61.98	10

Call	kc	m	kW
Ambon (Maluku)			
YDR3	3241	92.56	10
YDR2	7140	42.02	1
YDR	4865	61.66	1
Ternate (Maluku: relay)			
YDZ	2460	121.95	1
YDZ2	3915	76.64	1
Tdj. Pinang (Sumatra: relay)			
YDX	3223	93.09	1
YDX2	4920	60.98	1
YDX3	7190	41.72	1
Kupang (Nusa Tenggara)			
YDV	3259	92.05	5
Mataram (Nusa Tenggara)			
YDV5	3223	93.09	1
YDV	3365	89.15	1
Singaradja (Nusa Tenggara)			
YDU	4840	61.98	0.3
YDU7	2420	123.9	0.3
Sumenep (Madura)			
YDI20	3355	89.41	1
Purwokerto			
–	2485	120.7	
–	3232	92.82	
Djambi			
YDK6	2490	120.5	
YDK7	3375	88.89	
Palankaraya			
YDZ6	2350	127.6	
YDZ7	3325	90.23	
Kotabaru (West Irian)			
–	7190	41.72	10
–	6070	49.42	5
–	9745	30.78	5
–	3365	89.15	0.5
Biak (West Irian)			
–	7230	41.49	1
	3380	88.76	0.5
Manokwari (West Irian)			
–	3385	88.63	0.3
Sorong (West Irian)			
–	3395	88.37	1
Fak-Fak (West Irian)			
–	3345	89.69	0.5
Merauke (West Irian)			
–	3985	75.28	0.25

National Prgr. (Djakarta): 22.30(Sun 23.30)–07.30, 09.30–16.30 on 6045/7270/11770/15150/9585kc.
N: W 22.30, 23.30, 04.30, 05.30, 11.30, 12.30, 14.30. Sun 23.30, 00.30, 04.30, 05.30, 11.30, 12.30, 14.30 – **L.L. English:** Mon 10.30 (English for you), Wed 10.30, Thurs 12.30 (The road to English), Sat 12.30 (Listen and Teach). **French:** Mon 12.30, Thurs 10.30. **German:** Tues 12.30, Fri 10.30. **Russian:** Tues 10.30, Fri 12.30.
Local Prgr. (Djakarta): 09.30–11.30 on 2460kc.
Third Prgr. (Djakarta): 22.28–23.30 (Sun 23.28–02.30) on 3277/4805kc, 09.30–15.30 on 3277/4805kc.

Bandung, Jogjakarta, Semarang, Surabaja, Surakarta, Tjirebon, Bandjarmasin, Pontianak: W: 22.27–23.45, 05.27–06.45, 09.27–15.30. Sun 23.27–06.45, 09.27–15.30.
Padang, Bukittinggi, Kotaradja: W: 23.27–00.45, 06.27–07.45, 10.27–16.30. Sun 00.27–07.45, 10.27–16.30.
Djember, Madiun: D: 22.27–23.45, 09.27–15.30. Sun 23.27–06.45, 09.27–15.30.
Gorontalo, Kupang: D: 09.57–14.00 – **Ternate, Soa Siu:** 09.27–14.30.
Palembang: W: 22.57–00.15, 05.57–07.15, 09.57–16.00. Sun 23.57–00.45, 09.57–16.00.
Medan: W: 23.27–01.30, 06.27–08.15, 10.27–16.30. Sun 00.27–08.15, 10.27–16.30.
Sibolga: W: 23.27–00.45, 10.27–16.30. Sun 00.27–01.45, 10.27–16.30.
Makassar: W: 21.57–23.15, 04.57–06.45, 08.57–15.00. Sun 22.57–06.15, 08.57–15.00.
Menado: W: 22.00–23.15, 05.00–06.45, 09.00–15.00. Sun 23.00–06.15, 09.00–15.00.
Denpassar: W: 22.25–23.45, 05.25–06.45, 09.30–15.30. Sun 23.25–06.45, 09.30–15.30.
Ambon: W: 21.30–22.45, 04.27–05.45, 08.30–14.30. Sun 22.30–05.45, 08.30–14.30.
Tdj. Pinang: D: 10.27–16.30 – **Mataram:** D: 10.27–14.30 – **Singaradja:** D: 10.27–14.30 (relay).
Sumenep: D: 22.27–23.45, 09.27–15.30. Sun 23.57–01.30, 09.27–15.30.
Kotabaru, Biak: 20.00–22.30, 02.30–04.30, 07.30–13.30.

ANN: Nat. Prgr: Indonesian: "Inilah Radio Republic Indonesia di... (name of the station)".
INT-SIG: Nat. Prgr:



played on Hammond organ by Sudarnoto. **V.** by QSL-card or letter.

FOREIGN SERVICE (from Djakarta)

Call	kc	m	kW	Call	kc	m	kW
YDB3	7270	41.27	7.5	YDF2	11785	25.46	100
YDF6	9585	31.30	50	YDF3	11795	25.43	20
YDF6	9710	30.90	50	YDC	15150	19.80	100
YDF2	11715	25.61	100	YDF4	17810	16.84	50

English: 11.00–12.00 (Au, NZ) on 9585/11715kc, 14.30–15.30 (So. Ea. As, India, We. No. Am) on 9585/11715kc, 19.00–20.00 (Eu, NZ) on 9865/11715kc – **French:** 17.00–18.00 (Eu, ME, Af) on 9865/11715kc – **Indonesian:** 18.00–19.00 (Eu, ME) on 9585/11715kc, 01.00–02.00 (Am, Eo. Ea. As) on 9585/11795kc – **Chinese:** 12.00–13.00 (So. Ea. Asia) on 9585/11715kc – **Arabic:** 13.00–14.00 (So. Ea. Asia) on 9585/11715kc, 16.15–16.30 (ME) on 9865/11715kc – **Hindi:** 15.30–16.00 (So. Asia, Af) on 9585/11715kc – **Urdu:** 14.00–14.30 on 9585/11715kc.
Note: This schedule is changed every 3 months according to tentative high freq. broadc. sched.
ENGLISH: N: 11.15, 14.45, 19.15.
FRENCH: N: 17.41.
INDONESIAN: N: 18.15, 18.55, 01.15, 01.55.
ANN: E: "This is the Voice of Indonesia broadcasting from Djakarta". F: "Ici Djakarta, la voix de l'Indonésie".
INT-SIG: Some instrumental music in accordance with the genre of the next programme – **V.** by QSL-card or letter. Listeners rep.s are welcome.
PUB: Weekly: "Mingguan Radio", (home prgr.) – Monthly: "Voice of Indonesia" (Foreign broadc. in Indonesian, Hindi, Urdu, Chinese, Arabic, English, French, Dutch). Write to "Voice of Indonesia", RRI, P.O. Box 157, Djakarta.
Nippon Electric Co, Japan delivered to Djakarta: 1 × 100W, 1 × 10kW, tr's, studio and remote pick-up equip.

IRAN

L.T: GMT + 3½ h – **Pr.L:** Persian.
MINISTRY OF INFORMATION (Go.)
FI: By Go – **AD:** Allowed, income goes straight to the Treasury. 4 times daily (resp. 2, 2, 2, 15 mins.) – **ADDR:** Ministry of Information, Meydan Ark, Tehran. **Cable:** "Varatel". **Te:** 51161. **Telex:** 2077 – **L.P:** Minister of Inf. & Dir. Gen: H. E. N. Moinian. Gen. Mgr. & Chief Eng: M. R. Atefi.
STATIONS:

kc	m	kW	kc	m	kW			
895	335.2	50	7125	42.11	100	**FM:**	98Mc	0.5kW
1325	226.5	100/1	11730	25.58	100			
3780	79.30	100	15110	19.85	100			

HOME SCE. (R. Iran):
20.30–02.30 on 1325/3780kc, 02.30–03.30 on 1325/3780/7125kc (all 100kW), 04.30–16.30 on 1325/3780/7125kc (also relayed on 11730/15110kc for Europe), 17.30–19.30 on 1325/3780/7125kc. All prgr's at 02.30–19.30 also on FM – **N. in Persian:** 20.30, 21.30, 22.30, 23.30, 00.30, 01.30, 02.30, 03.30, 04.30, 05.30, 06.30, 08.25, 09.30, 10.30, 11.00, 12.30, 13.30, 14.30, 15.30, 16.30, 17.30, 19.30.
R. Teheran in Persian 895kc: 02.55–04.30, 06.25–09.30, 13.25–19.30.
FOREIGN SCE. to Europe: 17.30–21.30 on 11730/15110kc, 19.30–22.00 also on 895kc.
17.30 Russian, 18.00 Turkish, 18.30 Arabic, 19.30 **French,** 20.00 **English,** 20.30–21.30 special prgr. for Iranians abroad. All prgr's D. exc. Fri. when Persian.

REGIONAL STATIONS:
R. TABRIZ: On 650/6155kc (7.5/5kW): 02.55–05.30, 07.54–18.30. **Turkish** 08.30–09.00, **Armenian** 17.30–18.00, **Russian** 18.00–18.15.
R. REZAIEH: On 976kc (0.5kW): 12.00–16.30. **Kurdish** 14.00–14.30, **Assirian** 14.30–15.00. **Armenian** 15.00–15.30. **Turkish** 15.30–16.30.
R. ISFAHAN: On 1425/7888kc (1/0.4kW): 14.45–17.30.
R. ZAHEDAN: On 777kc (100kW): 12.55–19.30. **Balochi** 14.00–15.00. **Urdu** 15.00–16.00.
R. SANANDAJ: On 1475/6818kc (1/0.4kW): 02.45–04.30, 11.15–17.30. **Kurdish** 11.30–14.30.
R. KERMANSHAH: On 985kc (100kW): 12.15–19.30. **Kurdish** 14.30–17.30.
R. GORGAN: On 1462/6520kc (1/0.4kW): 13.15–17.30. **Turkuman** 15.30–17.30.
R. SHIRAZ: On 1060kc (1kW): 06.25–08.30, 12.15–18.30.
R. RESHT: On 680kc (1kW): 05.25–08.45, 12.45–17.30.
R. KERMAN: On 1090kc (1kW): 06.15–08.30, 13.25–16.30.
R. MESHED: On 1100kc (1kW): 07.15–08.30, 13.20–17.30. **Kurdish** 17.00–17.30.
R. AHWAZ: On 1390kc (100kW): 12.30–20.30. **Arabic** 15.30–20.30.

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Provides assistance and guidance to all foreign correspondents and news agency representatives visiting Iran, including interviews with personalities and visit to historical and developed sites also prepares and distributes publications, documentary films, slides and photographs on Iran. Tel. 51161-4.

International Service:

Conducts news in Persian, English, French, Turkish and Russian and local regional languages, and musical programme exchange with their description in foreign languages.

All services are free of Charge

Interested news agencies and broadcasting organizations throughout the world are invited to contact:

MINISTRY OF INFORMATION

Meidan Ark, Teheran, Iran – Tel. 51161-4

ANN: E: "This is Teheran, R. Iran". F: "Ici Teheran, R. Iran". Turkish: "Burasi Teheran, Iran Radyosu". Russian: "Govorit Tegeran, R. Iran". Persian: "Inja Teheran ast, R. Iran". Urdu: "R. Iran–Zahedan". Kurdish: "Dani Irana, Bashi Kurdi". Arabic: "Huna al Ahwaz, Der'el Isa'a al Iraniya". Baluchi: "Ada Zahedan, R. Iran". Armenian: "Tavrizne Khosoum". Assirian: "Lakha Rezaieh – Radio Azerbayjan Ma'arveta" – INT-SIG: Iranian Melody played on Tar (Persian string instrument). Beginning of the "Mahour" one of the seven sets of Iranian Music).

V. by letter. Rp. Records accepted – PUB: "Iran today" (Quarterly magazine) in E, F, G. "Facts about Iran" (weekly bulletin) in E, F, Arabic – F.PL: New Go. Radio & TV st.
Nippon Electric Company, Ltd, 2×100kW mw-tr's – Telefunken AG, 2×100kW sw-tr's – The Marconi Company, Ltd, 660W tr.
Wilh. Franz KG, Germany: EMT studio equip.

IRAQ

L.T: GMT+3 h – Pr.L: Arabic, Kurdish, Turkuman.

BROADCASTING STATION OF THE REPUBLIC OF IRAQ (Go.)

ADDR: Directorate Gen. of Broadcasting and Television, Salihiya, Baghdad. Cable: Broadcasts. Te: 31101 – L.P: Dir. Gen: A. S. Rashid. Dir. Tec: U. M. Ali.

STATIONS:

kc	m	kW	kc	m	kW	kc	m	kW
764	392.6	150/300	3240	92.59	50	6155	49.74	50
908	330.0	200	3990	75.19	50	7180	41.78	100
1350	222.2	20	6030	49.75	100	9555	31.40	50
			6095	49.22	100	9635	31.14	50

HOME SCE: Arabic: 02.30–05.30 on 908/6155/7180kc, 05.30–07.00 on 908/6155kc, 10.00–22.00 on 908/764/3990/6155/7180/9555kc, 22.00–22.15 on 908/3990/7180/9555kc.
N: 03.00, 05.00, 11.00, 15.00, 16.00, 17.00, 19.00, 22.00, also at 18.30, 21.00 on 764/3990kc – Wrp: 19.00 – T.S: Pips every h, clock striking at 05.00, 11.00, 15.00, 17.00, 19.00.
Kurdish, Turkuman: 02.30–05.30 on 1350/3240/6030kc, 05.30–07.00 on 1350/3240kc, 10.00–18.30 on 1350/3240/6030kc.

FOREIGN SCE:
Urdu 18.30–19.00 on 6030/9635kc, Persian 19.00–19.45 on 3240/6030kc, Turkish 19.45–20.30 on 3240/6030kc, French 20.30–21.00, English 21.00–21.40, German 21.40–22.10 on 6030/6095kc.
ANN: "Itha'at Al-Jemhoriya Al-Iraqiya Fi Baghdad" (The Broadcasting Service of the Iraqi Republic in Baghdad) – INT-SIG: Soft chirps of a mechanical nightingale – V. by QSL-card. Re. to Chief Eng. Records accepted.
Brown Boveri, Switzerland delivered 2 sw-tr's 250kW.
The Marconi Company Ltd, G.B. delivered one 20kW, four 100kW tr's.

ISRAEL

L.T: GMT+2 h – Pr.L: Hebrew, Arabic.

ISRAEL BROADCASTING SERVICE (Go.)

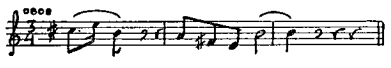
FI: By state, license payments, adv – AD: 5 min. of prgr. per h.
ADDR: Kol Yisrael, Israel Broadc. Sce, Broadc. House, Jerusalem. Cable: Kolyisrael. Te: 28161 – L.P: Dir. Gen: H. Givton. Dept. Dir: (Planning) Dr. Y. Spiro. Dept. Dir. (Adm): Z. M. Kenner. Dir. Prgr: Mrs. L. Porath. Dir. N. & Current Events: A. Gordon. Dir. Overseas Broadc: G. Wigoder. Dir. Arabic Prgr: Y. Hazma. Dir. Operations: N. Rogel. Head Foreign Relations: Mrs. R. Smilan. Dir. Tec: M. Berman – Ministry of Posts.

STATIONS: Medium Waves:

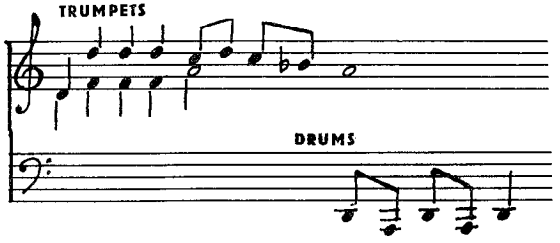
kc	m	kW	Call	Prgr.	kc	m	kW	Call	Prgr.
575	522	50/10	4XB36	A	1097	273.5	1	4XB43	A
656	457	100	4XB47	B	1169	256.6	1	4XB23	A
710	422.5	1	4XB20	B	1205	249	10	4XB35	A
737	407	100/200	4XB34	D	1336.5	224.5	1.5	4XB42	E
845	355	1			1358	220	0.5	4XB53	E
1025	292	0.5	4XB48	B					
Short Waves:									
9009	33.3	50/7.5	4XB31	C	7189	41.73	20	4XB49	D
9725	30.83	20	4XB51	E	9625	31.17	100		C

HOME SERVICE:
Main Prgr. in Hebrew (Prgr. A) on 575/1169/1205/1358/845kc: 04.00–06.00, 09.00–12.00, 15.00–21.00 – N: 04.00, 05.00, 06.00, 11.30, 15.00, 17.00, 19.00, 21.00.
Prgr. in Hebrew, Yiddish, Ladino, French, English, Rumanian, Hungarian on 656/710/1097kc: 11.00–12.00, 16.30–21.00. N: English: 11.00, 16.30. French: 11.30, 16.45 – Light Prgr. with comm: 06.00–08.00, 14.00–17.00, 19.30–21.00 – Arabic Prgr: D on 737/1025/7189/9725kc: 04.30–05.15, 11.15–12.15, 15.30–21.15.

ANN: Home Sce: "Kolyisrael Miyerushalayim". INT-SIG: Traditional Bible constellation played on obo strings.



FOREIGN SCE. on 9009/9625kc (Prgr. C)
9009kc (omnidirectional); 9625kc: 16.00–19.30 directed to Europe, 20.15–20.45 directed to So. Africa, 21.00–22.00 (Sun only) directed to No. Atlantic. At 04.15–04.30 9009kc directed to No. Am.
Yiddish 04.15–04.30, Yiddish 16.00–16.30, Persian 16.30–17.00, Russian 17.00–17.35, Mograbit 17.35–17.50, Rumanian 17.50–18.05, Hungarian 18.05–18.15, Spaniolish 18.15–18.30, Yiddish 18.30–19.00, Yivrith (Modern Hebrew) 19.00–19.30. French 19.45–20.15, English 20.15–20.45; Sun 21.00–22.00 for Seamen (in Yivrith) N: at the beginning of each prgr. and 16.20, 18.50 (Yiddish), 17.30 (Russian).
ANN: E: "This is Kolyisrael the Voice of Israel, broadc. from Jerusalem" – V. by QSL-card. INT-SIG: Hatiqva (Nat. Hymn).



JAPAN

L.T: GMT+9 h – Pr.L: Japanese.

NIPPON HOSO KYOKAI

(Public Corporation, non-Go, non-comm.)
(The Japan Broadcasting Corporation).
FI: In accordance with the Broadcast Law. NHK's operations are financed by the revenue from rcvr's fee.
ADDR: No. 2, 2-chome, Uchisaiwai-cho, Chiyoda-ku, Tokyo. Cable: "RADIONHK". Te: (501) 4111.
L.P: Chmn, (Board of Governors): Y. Chiba. Pres: Y. Maeda. Vice Pres: K. Ono. Chief Eng: Y. Tanabe. Gen. Man. Dir's: M. Akagi, Y. Kasuga, S. Tochizawa. Man. Dir's: S. Shimaura, I. Matsui, K. Shudo, F. Mikuma, T. Nomura, H. Asanuma. Auditor's: K. Sugimoto, Y. Yoshikawa, S. Monden. Dir's: Secr: H. Okada. Policy Study Board: T. Akimoto. Audit. Board: H. Sho. Prgr. Inspection Board: K. Kawakami. Public Rel. Board: T. Iida. 1st planning Bureau: T. Nomura. 2nd planning Bureau: M. Miyagawa. 3rd planning Bureau: Y. Sawamura. 4th planning Bureau: H. Matsuura. Financial planning Bureau: M. Shiga. Pers. Bureau: S. Kato. Labor Bureau: S. Omura. Dir. Gen. Broadc: Y. Kasuga. Program Contr's: I. Nihira, H. Sano, T. Hirata. Dir's: Educ. Dept: M. Nagahama Entertainm. Dept: T. Nagasawa. N. Dept: H. Sano. N Commentators Room: G. Fujise. Tech. Operation Dept: T. Sahara. Prgr. Service Dept: Y. Yoshida. Overseas Broadc. Dept: I. Matsui. General Affairs Dept: Y. Hirokawa. Finance Dept: T. Takeda. Eng. Dept: S. Shimizu. Facilities Constr. Dept: T. Shiromi. Subscript Dept: S. Kubo. Radio & TV Cult. Research Inst: A. Katagiri. Tech. Research Lab: T. Nomura. C. Training Inst: T. Matsunaga.

STATIONS: Medium Waves: The medium-wave (535–1650kc) tr's are used for domestic radio sce. in the 1st and 2nd net, both extensive enough to place the entire country under coverage.
Number of stations (as of Oct. 1, 1964): 1st Network: 166 – 2nd Network: 125.
[1]=1st net. [2]=2nd net.

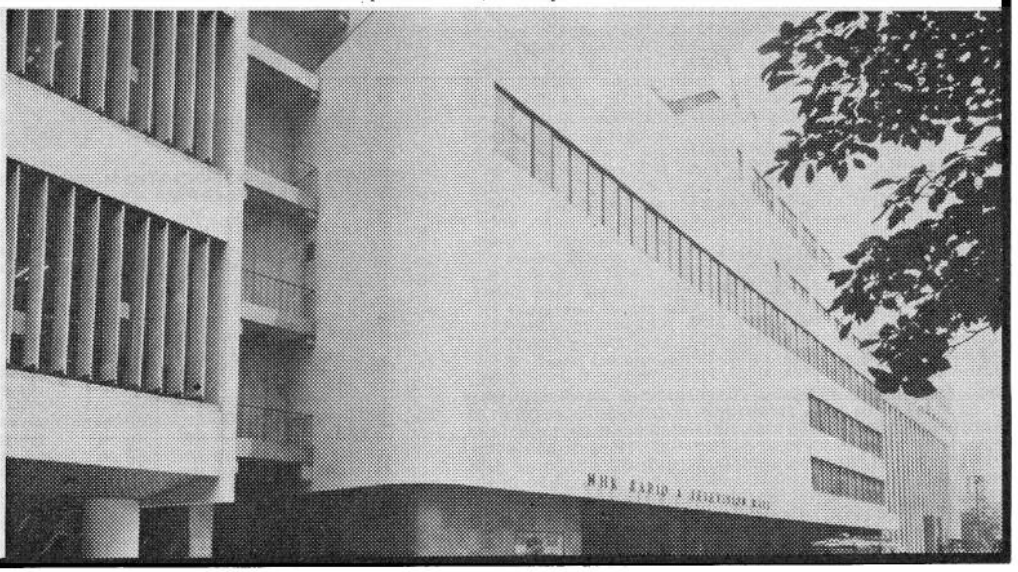
Call	kc	kW
°Sapporo		
[1]IK	570	100
[2]IB	750	100
Hakodate		
[1]VK	680	1
[2]VB	1470	1
Esashi		
[1] –	1030	0.05
[2] –	1360	0.05
Kariba		
[1] –	1160	0.1
[2] –	1540	0.1
Matsumae		
[1] –	1160	0.05
Asahikawa		
[1]CG	620	1
[2]CC	1470	1
Wakkanai		
[1]IQ	980	1
[2]IY	1470	0.5
Nayoro		
[1]CY	600	1
[2]AZ	1320	1
Rumoi		
[1]IX	1160	0.05
[2]CI	1360	0.05
Nakatonbetsu		
[1] –	1030	0.05
Enbetsu		
[1] –	790	1
[2] –	1600	1
Okihoro		
[1]OG	660	5
[2]OC	1080	1
Hiroo		
[1] –	1030	0.05
Kushiro		
[1]PG	640	10
[2]PC	1070	10
Nemuro		
[1]PQ	1030	0.1
[2]PS	1360	0.1
Nakashibetsu		
[1] –	1340	0.1
[2]	1540	0.1
Kitami		
[1]KP	1150	10
[1] –	1340	0.1
[2]KD	1370	10
Engaru		
[1] –	1030	0.1
Muroran		
[1]IU	780	1
[2]IT	1080	1
Urakawa		
[1] –	1340	0.1
°Sendai		
[1]HK	890	10
[2]HB	1090	10
Kesennuma		
[1]HS	1160	0.1
[2]HU	1540	0.1
Naruko		
[1] –	1160	0.1
Akita		
[1]UK	760	10
[2]UB	1590	10
Odate		
[1]UT	1160	0.1
[2]UV	1360	0.1
Yokote		
[1] –	1030	0.1
[2] –	1540	0.1
Hanawa		
[1] –	1340	0.1
[2] –	1520	0.1
Yamagata		
[1]JG	540	5
[2]JC	1470	1
Yonezawa		
[1]JQ	1030	0.05
[2]JZ	1360	0.05
Shinjo		
[1]JS	1340	0.05
[2]JT	1540	0.05
Tsuruoka		
[1]JP	1440	1
[2]JD	1080	1
Atsumi		
[1] –	1030	0.1
Morioka		
[1]QG	650	10
[2]QC	1220	10
Kamaishi		
[1]QS	580	0.1
[2]QT	1470	0.1
Miyako		
[1] –	1030	0.1
[2] –	1360	0.1
Ofunato		
[1] –	1030	0.1
[2] –	1360	0.1
Kuji		
[1] –	1340	0.1
[2] –	1540	0.1
Iwaizumi		
[1] –	790	0.1
Tono		
[1] –	1340	0.1
Fukushima		
[1]FP	580	0.1
[2]FD	1320	0.1
Koriyama		
[1]CP	620	1
[2]CD	1510	1
Wakamatsu		
[1]HT	1160	0.1
[2]HY	1540	0.1
Tadami		
[1] –	1030	0.1
[2] –	1360	0.1
Tajima		
[1] –	1340	0.1
Taira		
[1]HQ	1340	0.1
[2]HZ	1540	0.1
Somahara-machi		
[1] –	1160	0.1
Aomori		
[1]TG	960	5
[2]TC	1320	1
Hirosaki		
[1]RG	1440	0.5
[2]RC	820	0.5
Fukaura		
[1] –	1340	0.1
Hachinohe		
[1]TQ	1300	1
[2]TZ	1510	1
*Tokyo		
[1]AK	590	100
[2]AB	690	300
Nagano		
[1]NK	620	1
[2]NB	1320	1
Komoro		
[1]NQ	1030	0.1
[2]NZ	1540	0.1
Ueda		
[1] –	1340	0.1
[2] –	1470	0.1
Matsumoto		
[1]SG	540	1
[2]SC	1510	1
Iida		
[1]SQ	620	1
[2]SZ	1320	0.5
Ina		
[1] –	1340	0.05
[2] –	1540	0.05
Okaya-Suwa		
[1]SU	1160	0.1
[2]SI	1360	0.1
Kyso-Fukushima		
[1] –	1030	0.1
[2] –	1600	0.1
Komagane		
[1] –	1240	0.1
Niigata		
[1]QK	840	10
[2]QB	1190	10
Takada		
[1]QX	790	0.1
[2]QV	1360	0.1
Tsunan		
[1] –	1160	0.1
[1] –	1540	0.1
Kofu		
[1]KG	980	5
[2]KC	1470	1
Fuji-Yoshida		
[1]YP	1340	0.1
°Nagoya		
[1]CK	730	10
[2]CB	910	10
Takayama		
[1]CQ	790	1
[2]CZ	1470	0.5
Ueno		
[1]CT	1160	0.1
Owase		
[1]CU	1160	0.1
[2]DS	1540	0.1
Nakatsugawa		
[1] –	1160	0.1
[2] –	1360	0.1
Kamioka		
[1] –	1340	0.05
[2] –	1080	0.05
Gujo-Hachiman		
[1] –	1300	0.05
[2] –	1540	0.05
Hagiwara		
[1] –	1340	0.05
Kumano		
[1] –	1300	0.1
Shiratori		
[1] –	1160	0.05
Toyohashi		
[1]CS	1160	0.1
[2]CV	1360	0.1
Kanazawa		
[1]JK	1170	10
[2]JB	1390	10
Nanao		
[1]JU	540	0.1
[2]JV	1470	0.1
Wajima		
[1] –	1160	0.05
[2] –	1360	0.05
Yamanaka		
[1] –	1030	0.02
Shizuoka		
[1]PK	880	10
[2]PB	1500	10
Atami		
[1] –	1160	0.1
Sakuma		
[1] –	1340	0.5
Hamamatsu		
[1]DG	580	1
[2]DC	1520	1
Fukui		
[1]FG	980	5
[2]FC	1520	1
Tsuruga		
[1]FT	1030	0.1
[2]FZ	1470	0.1
Obama		
[1]FY	1160	0.1
[2]FQ	1360	0.1
Katsuyama		
[1] –	1160	0.1
[2] –	1360	0.1
Toyama		
[1]IG	580	5
[2]IC	1520	1
°Osaka		
[1]BK	670	100
[2]BB	830	100
Shingu		
[1]BQ	1030	0.1
[2]BY	1360	0.1
Toyooka		
[1]BU	1160	0.1
[2]BV	1540	0.1
Tanabe		
[1]BT	1160	0.1
[2]TD	1360	0.1
Hikone		
[1]BS	780	0.1
Koza		
[1] –	1340	0.05
[2] –	1600	0.05
Kazumi		
[1] –	1340	0.1
Miki		
[1] –	670	0.05
[2] –	830	0.05
Kyoto		
[1]OK	1300	1
[2]OB	1510	1
Fukuchiyama		
[1]OT	1030	0.1
[2]OS	1360	0.1
Maizuru		
[1]OQ	1340	0.1
[2]OZ	1540	0.1
Miyatsu		
[1] –	1440	0.1
°Hiroshima		
[1]FK	770	10
[2]FB	1070	10
Shobara		
[1] –	1160	0.05
[2] –	1360	0.05
Miyoshi		
[1] –	1440	0.1
[2] –	1080	0.1
Tojo		
[1] –	790	0.1
Kure		
[1] –	1240	0.1
[2] –	1520	0.1
Onomichi		
[1]DP	1000	1
[2]DD	1470	1
Fukuyama		
[1] –	1340	0.1
Okayama		
[1]KK	600	5
[2]KB	1600	5
Tsuyama		
[1]KU	1160	0.1
[2]KT	1540	0.1
Niimi		
[1]KI	1340	0.1
[2]KV	1540	0.1
Matsue		
[1]TK	850	10
[2]TB	1490	10
Hamada		
[1]TS	1030	0.1
[2]TT	1360	0.1
Masuda		
[1] –	1340	0.1
[2] –	1540	0.1
Tsuwano		
[1] –	1160	0.1
[2] –	1360	0.1
Iwami		
[1] –	620	0.05
Kawamoto		
[1] –	1300	0.05
Tottori		
[1]LG	1300	1
[2]LC	1470	1
Kurayoshi		
[1] –	1030	0.1
[2] –	1360	0.1
Hino		
[1] –	1300	0.1
Yonago		
[1]LQ	780	1
[2]LU	1520	1
Yamaguchi		
[1]UG	680	5
[2]UC	820	5
Hagi		
[1]UQ	960	1
[2]UZ	1600	0.5
Shimonoseki		
[1]UI	1160	0.1
[2]UU	1360	0.1
°Matsuyama		
[1]ZK	960	5
[2]ZB	1510	5
Uwajima		
[1]ZU	1440	1
[2]ZY	1600	1
Ozu		
[1] –	790	0.1
Niihama		
[1]ZQ	1440	0.1
[2]ZZ	1320	0.1
Imabari		
[1]ZT	1160	0.05
[2] –	1540	0.1
Yawatahama		
[1]ZS	580	0.1
[2]ZI	1360	0.1
Johen		
[1]ZV	1340	0.05
[2]ZX	1540	0.05
Uwa		
[1] –	1030	0.05
Kochi		
[1]RK	990	10
[2]RB	1370	10
Nakamura		
[1]RQ	1000	1
[2]RY	1520	0.5
Yusuhara		
[1] –	1160	0.1
[2] –	1470	0.1
Sukumo		
[1] –	1030	0.05
Taishio		
[1] –	1300	0.1
Tokushima		
[1]YK	780	5
[2]XB	1520	1
Ikeda		
[1]XI	1160	0.1
[2]XU	1360	0.1

Advertisement

NHK

NHK or the Japan Broadcasting Corporation is Japan's only non-commercial public broadcasting service financed solely by radio and television subscription fees. The sole object of NHK is to promote the general welfare of the public to raise the cultural level of the people through broadcasting.

The photograph indicates the rapid development of NHK. From right to left, the Main Building, Annex, and Second Annex. NHK is also constructing its Broadcasting Center at Yoyogi, Tokyo. This will be 7-storied building with a total floor space of 65,000 square meters.



Call	kc	kW
Mugi		
[1] –	1030	0.1
Takamatsu		
[1]HP	1300	5
[2]HD	1080	1
Kannonji		
[1] –	1030	0.1
°**Kumamoto**		
[1]GK	930	10
[2]GB	1590	10
Hitoyoshi		
[1]GQ	1240	1
[2]GV	1600	1
Fukuoka		
[1]LK	610	100
[2]LB	870	100
Kitakushu		
[1]SK	540	1
[2]SB	1600	1

Call	kc	kW
Nagasaki		
[1]AG	660	5
[2]AC	1080	1
Shimabara		
[1] –	1160	0.02
Sasebo		
[1]AT	790	0.5
[2]AY	1510	0.5
Kagoshima		
[1]HG	700	10
[2]HC	1220	10
Naze		
[1]HI	580	1
[2]HV	1320	1
Akune		
[1] –	1030	0.1
[2] –	1470	0.1
Tokunoshima		
[1] –	1340	0.1

Call	kc	kW
Miyazaki		
[1]MG	540	1
[2]MC	1470	1
Nobeoka		
[1]MT	620	1
[2]MX	1320	1
Nichinan		
[1] –	1340	0.1
[2] –	1540	0.1
Takachiho		
[1] –	1030	0.1
[2] –	1360	0.1
Kushima		
[1] –	1030	0.05
Oita		
[1]IP	790	1
[2]ID	1470	1

Call	kc	kW
Miyakonojo		
[1]MQ	1160	0.1
[2]MU	1360	0.1
Kobayashi		
[1] –	1030	0.1
[2] –	1540	0.1
Saeki		
[1] –	1160	0.1
[2] –	1520	0.1
Hita		
[1]IV	1030	0.05
Saga		
[1]SP	960	1
[2]SD	1320	1
Karatsu		
[1]SV	1160	0.05

* = Headquarters ° = Reg. Central St.

HOME SERVICE

1st NET: D 20.00–15.00 – **N:** W: Every h and 00.30, 01.30, 02.30, 05.30(not Sat), 06.30, 07.30(not Sat), 08.40(not Sat), 14.55. Sun: Every h and 14.55 exc. 01.00, 02.00, 04.00, 05.00, 09.00, 11.00 – **Wrp:** W 20.30, 20.57, 21.13, 21.59, 22.15, 22.59, 23.59, 00.59, 01.59, 02.55, 03.13, 03.59, 04.59, 05.59, 06.08, 06.59, 07.59, 08.08, 08.59, 09.50, 10.15, 11.58, 12.08, 12.59, 13.08, 13.59. Sun: as on W exc. 05.59, 07.59, 11.00 – **Mbg:** W 21.50 – **T.S:** Every h.

2nd NET: D 20.30–15.00 – **English N:** W 09.55 – **L.L: Fundamental Course of English:** W 21.05–21.25, 09.20–09.40. **English Conversation:** W 21.25–21.40, 09.40–09.55. **German:** 14.00–14.15. **French:** 14.15–14.30 – **Wrp:** 00.15–00.30, 07.00–07.15 – **School Broadc:** W 00.00–03.35, 04.00–04.15(not Sat).

The two networks together are on the air for a grand total of 37.5hrs* daily – * classified by broadc. h (%), 1st Net: News 36.1, Educ. 9.0, Culture 27.2, Entertainment 27.7. 2nd Net: News 10.9, Educ. 46.3, Culture 39.9, Entertainment 2.9.

FM STATIONS:

	Mc	kW		Mc	kW		Mc	kW
Sapporo	85.2	3	Nagoya	82.5	3	Matsuyama	87.7	1
Asahikawa	85.8	0.5	Kanazawa	82.2	1	Kochi	87.5	0.5
Sendai	82.5	3	Shizuoka	88.8	0.5	Kumamoto	85.4	1
Akita	86.7	1	Toyama	81.5	1	Fukuoka	84.8	1
Morioka	83.1	1	Osaka	88.1	10	Kitakyushu	85.7	0.25
Fukushima	85.3	1	Hiroshima	88.3	1	Nagasaki	84.5	0.25
Tokyo	82.5	10	Okayama	88.7	1	Kagoshima	85.6	1
Nagano	84.0	0.5	Matsue	84.5	0.5	Miyazaki	86.2	0.25
Nigata	82.3	1	Yamaguchi	85.3	0.25			

D 21.00–15.00 (Monophonic & Stereophonic broadc).

RELAYS OF HOME SERVICE PRGR'S ON SHORTWAVES:

kc	m	kW	Time	kc	m	kW	Time
3259	92.05	0.3	08.30–13.00[1]	6005	49.96	0.3	08.00–15.00[4]
3377	88.85	0.3	08.10–13.10[2]	6130	48.94	0.6	20.30–05.30[7]
3607	83.22	0.6	09.00–11.00[3]				09.00–15.00[7]
3970	75.57	0.3	20.00–06.00[4]	6175	48.58	0.9	20.30–23.30[8]
3970	75.57	0.6	06.00–11.00[5]	6175	48.58	0.6	00.00–09.00[9]
			11.00–12.00[6]	6190	48.47	0.3	20.30–03.30[2]
			12.00–15.00[5]				03.30–08.00[1]
6005	49.96	0.6	20.40–01.00[5]	9550	31.41	0.9	01.00–07.00[9]
			02.30–04.25[5]				07.00–12.00[8]

[1] 1st Prgr of Sendai st, – [2] 2nd Prgr of Osaka st. – [3] 2nd Prgr of Hiroshima st. – [4] 1st Prgr of Nagoya st. – [5] 1st Prgr of Matsuyama st. – [6] 1st Prgr of Sapporo st. – [7] 2nd Prgr of Kumamoto st. – [8] 2nd Prgr of Tokyo st. – [9] 1st Prgr of Tokyo st.

FOREIGN SERVICE (R. Japan)

I = So. Asian Sce., II = Mid. East & No. African Sce., III = African Sce., IV = No. American Sce., V = No. & Latin American Sce., VI = Hawaiian Sce., VII = European Sce., VIII = Latin American Sce., IX = Australia & N. Z. Sce., X = Asian Continent Sce., XI = Korean Sce., XII = East Asian Sce., XIII = Philippine & Indonesian Sce., XIV = Southeast Asian Sce.

Japan

Languages: a) Hindi, English, Urdu, Bengali–b) Arabic, French, English–c) Russian, German, French, Italian, English, Swedish–d) English, Swahili, French–e) English, Japanese–f) Spanish, Japanese, English – g) Japanese, Portuguese, Spanish–h) Korean–i) Chinese, Russian – k) Japanese–l) English, Malay, Indonesian–m) Chinese, French, Vietnamese, English, Thai – n) English.

STATIONS: 20/50/100/200kW.

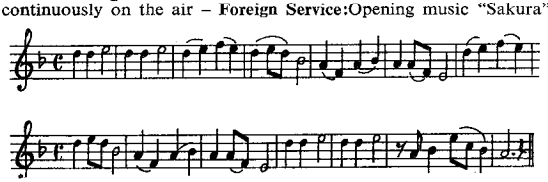
kc	m	kc	m	kc	m	kc	m
6080	49.34	9740	30.80	15105	19.86	15425	19.45
6140	48.86	9765	30.72	15115	19.85	17725	16.93
7195	41.70	11705	25.63	15135	19.82	17755	16.90
9505	31.56	11725	25.59	15175	19.77	17785	16.87
9525	31.50	11780	25.47	15195	19.74	17795	16.86
9530	31.48	11800	25.42	15225	19.70	17825	16.83
9580	31.32	11815	25.39	15235	19.60	17855	16.80
9605	31.23	11855	25.31	15285	19.63	17870	16.79
9675	31.01	11865	25.28	15310	19.60	17875	16.78
9695	30.94	11875	25.26	15325	19.58	17895	16.76
9705	30.91	11940	25.13	15390	19.49		

Times	Sce	kc	Languages
15.00–16.30	I	7195, 9525, 9705	a
16.45–18.45	II	7195, 9525	b
19.00–20.00	III	7195, 9525	d
00.00–01.00	IV	11780, 15135	n
02.00–04.00	V	9525, 11780	f
05.30–07.00	VI	11705, 15235	e
06.15–08.45	VII	11875, 15135	c
09.00–10.30	VIII	9530, 9765, 11705	g
09.30–10.30	IX	11875, 15235	n
10.45–12.15	X	9525, 9675, 11705	i
11.00–12.00	XI	6080, 6140, 7195	h
12.15–14.45	XII	6080, 7195, 9705	k
12.30–14.30	XIII	9525, 11780, 11940	l
13.00–16.00	XIV	9675, 11705, 11875	m

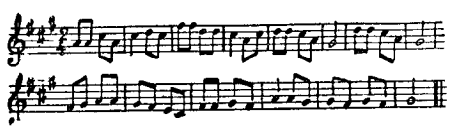
General Sce. in English, Japanese: 00.00, 01.00 on 15105/15310/15425 kc; 02.00, 03.00, 04.00 on 11705/15195/15310kc; 05.00, 06.00, 07.00, 08.00, 09.00, 10.00, 11.00 on 9505/11815/15310kc; 12.00, 13.00, 14.00, 15.00, 16.00, 17.00, 18.00, 19.00 on 9505/9605/9740kc; 20.00 on 9605/9740/15195kc; 21.00, 22.00 on 6140/9605/15195kc; 23.00 on 6140/15105/15425kc.

NEWS: English: 15.15 (I), 17.25 (II), 19.00 (III), 00.00 (IV), 03.15 (V), 05.30 (VI), 08.00 (VII), 09.30 (IX), 12.30 (XIII), 14.45 (XIV) and in Gen. Sce. at the beginning of each tr.
French: 19.35 (III), 07.25 (VII), 14.20 (XIV) – **German:** 06.50 (VII) – **Italian:** 07.45 (Mon) – **Portuguese:** 09.50 (VIII) – **Spanish:** 02.00 (V), 10.20 (VIII) – **Swedish:** Sun 08.30 (VII) – **Russian:** 11.35 (X), 06.15 (VII) – **LISTENERS CORNER (English):** Sat: 08.30 (VII), 10.15 (IX), 15.45 (I), 17.55 (II). Sun: 00.45 (IV), 06.00 (VI), 13.00 (XIII), 15.15 (XIV). Fri: 19.20 (III) – **SCANDINAVIAN HOUR (Swedish):** Sun: 08.30–08.45.

ANN: Home Service: The call sign and the station name are announced at the commencement and end of each transmission. At intervals between programmes, an announcement, "NHK" is made at the end of the news prgr's of both 1st network and of FM network. It also comes before the call sign of 2nd network.
Foreign Service: English: "This is Radio Japan, the overseas broadcasting service of NHK. We are broadcasting to...("target area")" – **French:** "Ici Radio Japon...(target area)" – **German:** "Hier ist Tokyo, der japanische Rundfunk...(target area)" – **Italian:** "Buon giorno, sign. radioascoltatori Italiani. Qui Radio Giappone – Reparto Servizio Internazionale di NHK..." – **Spanish:** "Aqui Radio Japon..." – **Portuguese:** "Estao ouvindo a Radio Japao..." – **Indonesian:** "Inilah Radio Djepang, siaran international dari NHK di Tokio...".
INT-SIG: Home Service: Both on the 1st and the 2nd networks, a musical sign is beamed on a celeste before commencing broadcasting. No interval signal is used since both the 1st and the 2nd networks are continuously on the air – **Foreign Service:**Opening music "Sakura"



Interval signal music "Kazoe Ufa"



PUB: Graph NHK (twice a month) NHK Hoso Bunka or NHK Broadcast Culture (monthly in Japanese only) – **NHK** Year Book (annual) in Japanese NHK Handbook (Yearbook in English, annual "R. Japan News" (monthly in English, Japanese and others). "This is NHK" (annual in English), "NHK Today" (annual in English), "Broadcasting Engineering of NHK" (annual in English), "NHK Radio & TV Educational Broadcasts" (English), "What is NHK Doing (monthly in English – send by request), "NHK Technical Monograph" (irr. in English), "NHK Laboratories Note" (irr. in English), "NHK Technical Research Laboratories" (annual in English). R. & TV prgr. schedules are published annually in April, when the schedules are revised. The prgr. sched. for Overseas Sce. (R. Japan) is distributed upon request. No return postage required – V. by QSL-card and by letter.
F.PL: By the end of 1967 st's will be increased to 461 for the General TV-netw. and 461 for the Educational TV netw. Number of FM st's will be 153. All total of NHK's radio and TV-st's at the end of 1967 will be 1386.
Nippon Electric Co: 1×150kW, 2×100kW, 9×10kW, 2×5kW, 1×1kW + 13 low power mw-tr's and various studio equip. to 28 st's of NHK, 50kW sw-tr (Nazaki).

THE NATIONAL ASSOCIATION OF COMMERCIAL BROADCASTERS IN JAPAN

ADDR: 7-2 Ginza-Nishi, Chuo-ku, Tokyo. **Cable:** Kyobashi Mimporen. **Te:** 571-9936 – **L.P: Board of Directors:** Pres: T. Adachi. Vice Pres: T. Hirai, T. Kubota. Exec. Dir: S. Sakai. Directors: T. Ota, K. Shikakura, K. Kayahara, Y. Shimizu, H. Okawa, U. Suzuki, K. Yamada, K. Yamamoto, M. Minami, S. Mizuno, T. Maeda, T. Okano, H. Sato, J. Hirai, T. Hisa, Y. Hoshino, S. Hatanaka. Auditors: T. Hayakawa, M. Kubo. Councellor: K. Kuga.
MEDIUM WAVES: Call: JO--.

Call	kc	kW	Call	kc	kW	Call	kc	kW
1) CR	560	10	7) WR	1060	0.1	13) SF	1330	10
2) DF	720	5	7) WW	1060	0.1	18) ER	1350	10
3) IL	720	1	7) WE	1060	0.1	37) UF	1380	20
4) JF	740	5	8) SL	1060	0.1	29) VR	1400	5
5) LR	740	5	8) SE	1060	0.1	29) 3H	1400	0.5
6) TO	800	0.1	9) DE	1060	0.1	19) QL	1400	1
12) AL	800	0.1	11) YO	1060	0.1	3) IF	1410	10
3)	800	0.05	11) YE	1060	0.1	11) 5A	1420	0.05
3) IM	800	0.04	13) SM	1060	0.1	11) YR	1420	5
13) OL	800	0.1	23) UE	1060	0.1	19) TL	1420	1
14) HM	800	0.1	28) GE	1060	0.1	10) BO	1430	0.1
15) ZO	800	0.1	16) AO	1060	0.1	28) GO	1430	1
16) AW	800	0.1	29) VW	1060	0.05	38) VF	1430	3
17) IO	800	0.1	20) JO	1060	0.1	38) 4D	1430	0.05
18) EW	800	0.1	30) FE	1060	0.04	43) ZF	1430	1
7) FL	800	0.1	30)	1060	0.1	19) QM	1450	1
16) AW	800	0.1	31) BL	1060	0.1	39) KF	1450	5
19) QN	800	0.1	18) EO	1060	0.1	24)	1460	0.1
20)	800	0.1	41)	1060	0.1	25) PL	1460	1
8) SO	860	1	8) SR	1100	1	23) UO	1460	1
19) HE	860	1	23)	1100	20	40) RF	1480	10
21) PR	860	5	23) MF	1100	1	30) FO	1530	1
19) QF	860	1	24) NF	1100	1	9) DO	1530	1
13) SN	860	0.1	9) WO	1100	1	12) AM	1530	0.1
14) HF	900	5	32) GF	1100	1	44) XF	1530	1
14) –	900	0.1	34) MR	1110	5	2) DN	1560	0.1
15) ZR	900	5	12) AF	1120	5	41) CL	1560	0.1
19) HO	900	1	9) DR	1120	5	6) TE	1560	0.1
14) –	900	0.05	14) HM	1120	0.1	10) BE	1560	0.1
22) EF	920	5	33) QR	1130	50	13) XO	1560	0.1
22) 8AB	920	1	10) BR	1140	10	38) VM	1560	0.1
24) –	920	0.05	34) MO	1200	1	38) DN	1560	0.05
24) –	920	1	8) SW	1200	1	14) HL	1560	0.1
25) PM	920	0.1	31) BF	1200	5	21) PO	1560	0.1
6) TR	940	5	45) YF	1200	1	24) –	1560	0.1
25) PN	920	0.05	35) OR	1210	10	32) GL	1560	0.1
25) PF	940	5	23) UR	1230	3	16) AE	1560	0.1
26) KR	950	50	28) GR	1230	1	16) –	1560	0.05
27) NR	1010	20	17) IR	1260	10	29) VE	1560	0.1
16) AR	1050	10	30) FR	1270	10	39) KL	1560	0.1
38) VL	1060	0.1	19) HW	1280	5	29) 3A	1560	0.05
2) DL	1060	0.1	20) JR	1280	5	17) IE	1560	0.1
2) DM	1060	0.1	19) HR	1290	10	16) RO	1560	0.1
4) JL	1060	0.1	36) LF	1310	50			

Short Waves:

Call	kc	m	kW	Call	kc	m	kW
42) Z	3925	76.43	50	42) Z2	6055	49.55	50/10
42) Z4	3945	76.05	10	42) Z3	9595	31.27	50/10
42) Z5	3945	76.05	10	42) Z6	7230	41.49	10

Nippon Electric Co., Ltd. Japan: M.W. st's.
1) **R. Kansai Ltd,** 3–7, Isonare-cho, Suma-ku, Kobe. **Te:** 7-4321 – Chmn: H. Miyazaki. Pres: K. Tanaka. Dir. Tec: T. Masuda. 20.30–15.00. V. by QSL-card.

2) **Iwate Broadc. Co,** Morioka – Pres: T. Ohta. Dir. Gen: M. Yoshida. 20.00–15.00.
3) **Kyushu Asahi Broadc. Co,** Fukuoka – Chmn: I. Dan. 20.30–15.40. V. by QSL-card.
4) **Yamanashi Broadc. System Inc,** 288 Hyakokumachi, Kofu – Pres: J. Noguchi. 20.30–14.45 – 5) **Kita-Nihon Broadc. Co,** Toyama – Pres: R. Yokoyama. 21.50–14.10.
6) **Akita Broadc. System,** Akita – Pres: G. Kurata. 20.00–14.40.
7) **R. Fukushima Broadc. Co,** Fukushima – Pres: T. Tobishima. 20.00–15.30.
8) **Shinetsu Broadc. Co,** Nagano – Pres: J. Katsuta. 20.00–15.05.
9) **Broadc. System of Niigata,** 3–18 Kawagishi-cho, Niigata – Chmn: K. Sakaguchi.
10) **Kyoto Broadc. Co,** Nakakyo-ku, Kyoto. Chmn: T. Nakano – 20.30–16.00. N: every h on the h from 21.00. V. by QSL-card. Prgr. schedule on request – 11) **Sanyo Broadc. Co,** Okayama – Pres: H. Taniguchi. 20.30–15.00. V. by QSL-card.
12) **Nankai Broadc. Co,** Matsuyama – Pres: Y. Yamanaka.
13) **Tokai R. Broadc. Co,** Higashi-ku, Nagoya – Pres: M. Abo. 20.00–18.00. V. by QSL-card – 14) **San In Broadc. System,** Yonago – Chmn: H. Sakaguchi. 20.35–15.05.
15) **R. Kochi Broadc. Co,** Kochi – Chmn: Y. Fukuda.
16) **Chubu-Nippon Broadc. Co,** Shinsakae-machi, Naka-ku, Nagoya. Te: 24-8111 – Pres: K. Sasabe. 20.30–16.00. V. by QSL-card. Prgr. schedule free.
17) **Tohoku Broadc. Co,** Sendai – Pres: C. Sugano. 20.30–15.15.
18) **R. Chugoku Co,** Hiroshima – Chmn: S. Fujita. 20.30–15.00.
19) **Hokkaido Broadc. Co,** Sapporo, Hokkaido. Te: 23-8181 – Pres: K. Abe. Dir. Gen: K. Muroya. 20.30–16.00. N: 06.55, 07.55, 08.50, 09.25, 13.30, 14.57. V. by QSL-card. Prgr.schedule free.
21) **Fukui Broadc. Co,** Fukui – Pres: H. Kato. Dir. Gen: Y. Yoshida.
20) **Shikoku Broadc. Corp,** Tokushima – Chmn: S. Maekawa. Pres: T. Yamauchi. 20.30–16.10.
22) **Yamagata Broadc. Co,** Yamagata – Pres: Y. Hattori. 20.00–14.45. V. by QSL-card.
23) **Nagasaki Broadc. Co,** Nagasaki – Pres: T. Nakabe.
24) **Miyazaki Broadc. Co,** Miyazaki – Chmn: S. Iwakiri. 20.30–15.05. V. by QSL-card.
25) **Yamaguchi Broadc. Co,** Tokuyama – Pres: K. Nomura. 20.30–15.00. V. by QSL-card.
26) **Tokyo Broadc. System,** Main Office: 36 Hitotsugi-cho, Akasaka, Minato-ku, Tokyo. Cable: JOKR. Te: 481-8711 – Chmn: T. Adachi. Pres: Y. Shikakura. Dir. Gen: Y. Tanaka, J. Imanichi. Dir. Tec: M. Yoshida. Dir. Prgr: Y. Wakede (Radio), N. Omori (TV). 20.00–16.30. N: 5 min every h – Ann: "JOKR Kochirawa Tokyo Hoso desu". E: "JOKR This is TBS". V. by QSL-card.
27) **Asahi Broadc. Corp,** Main Office and R.st: Nakanoshima, Kitaku, Osaka. TV st. Dojima, Kita-ku, Osaka. Tokyo Office: New Asahi Shimbun Bldg, Yurakucho, Chiyoda-ku, Tokyo. Cable: JONRTV. Te: 231-8001 – L.P: Pres: K. Suzuki. Vice-Pres: T. Hirai. Man. Dir. (sales): M. Kobayashi, (Prgr): K. Hara, (Gen. Affairs): D. Ado. Dir. Tec: K. Endo. Dir. Tokyo Office: M. Kobayashi. Dir. Prgr: M. Yoshida. Dir. Tec: E. Habu. Dir. Gen. Affairs: Y. Takaishi – D.Prgr: 20.00–17.00. N: W 20.50, 21.50, 22.50, 23.55, 00.50, 01.50, 02.50, 03.50, 04.50, 05.50, 06.50, 07.50, 08.50, 09.50, 12.50, 13.50. Sun 20.50, 21.50, 22.50, 00.50, 02.50, 06.50, 09.50, 12.50, 13.50. Ann: "ABC Asahi Hoso, JONR" – V. by QSL-card. Pub: "Radio and TV Asahi", monthly.
28) **Aomori Broadc. Corp,** Aomori – Chmn: S. Takeuchi. 20.00–14.50.
29) **Shizuoka Broadc. System,** Shizuoka – Chmn: K. Komuratani. 20.30–14.30 – 30) **RKB Mainichi Broadc. Co,** Fukuoka – Chmn: H. Kaneko. 20.45–15.45 – 31) **Kumamoto Broadc. Corp,** Kumamoto – Chmn: T. Izu. 23.50–04.40 & 08.30–16.30 – 32) **Oita Broadc. Sce,** Oita – Pres: Y. Hoshino. 20.30–15.00. V. by QSL-card.
33) **Nippon Cultural Broadc. Inc,** Shinjuku, Tokyo – Pres: S. Mizuno, Mgr: S. Tomoda. 20.00–16.55. Ann: "Okiki no hoso wa Bunka Hoso 1130kc desu". V. by QSL-card – 34) **Hokuriko Broadc. Co,** Kanazawa – Chmn: Y. Miyashita. 20.30–15.00.
35) **Mainichi Broadc. System Inc:** Head Office: 53 Funadaiku-cho, Dojima, Kita-ku, Osaka. Tokyo Office: Yuraku-cho, Chiyoda-ku, Tokyo. Cable: Mainichihoso Osaka. Te: Head Office: 361-8231. Chmn: C. Honda. 20.30–16.00. N: every h on the h 21.00–07.00, 09.00, 14.00. Ann: "MBS, Mainichi Hoso desu". V. by QSL-card. Prgr.schedule on request.
36) **Nippon Broadc. System Inc,** Yuraku-cho, Chiyoda-ku, Tokyo. Chmn: K. Uemura. Dir. Gen: N. Shikanai – 24 h. N. Wrp: 00.30, 01.30, 03.30, 05.30, 06.30, 07.30, 09.30, 11.30, 12.30, 13.30, 14.30, 15.30, 17.30, 23.30. Ann: "Okiki no Hoso wa 1310kc Shutsu-ryoku 50kW de ookuri shiteiru Nippon Hoso desu" ("This is Nippon Hoso"). V. by QSL-card.
37) **Osaka Broadc. Co,** 27 Umeda-cho, Kita-ku, Osaka. Te: 361-1271 – Pres: H. Maeda. 20.30–17.30. Ann: "Okiki no hoso wa Rajio Osaka desu". Int-Sig: Gong. V. by QSL-card. Records accepted.
38) **Wakayama Broadc. Corp,** Wakayama – Chmn: K. Maeda. Pres: O. Tsubota. 20.30–15.30.
39) **Nishi-Nippon Broadc. Co,** Takamatsu – Pres: J. Hirai.
40) **R. Kanto,** Oimatsu-cho, Nishi-ku, Yokohama – Pres: H. Sasaki. 20.00–16.35. V. by QSL-card.
41) **Minaminihon Broadc. Co,** 17, Korai-cho, Kagoshima – Chmn: K. Ueno. 23.50–13.55. V. by QSL-card.
42) **Nihon Shortwave Broadc. Co,** Akasaka, Minato-ku, Tokyo. Te: 481-8151 – Pres: S. Odazima. Dir. Gen: Z. Takano. Mgr: B. Ando. Dir. Tec: S. Ito. Dir. Prgr: H. Otomo. D.Prgr: 20.30–15.45. N: 23.30, 03.30, 08.30, 14.30. N. in English: 13.50–14.00. SW-schedule: 1st Prgr: 20.30–15.45 on 3925/6055/9595kc; 20.30–23.00 & 08.00–15.45 on 3945kc JOZ4 (Sapporo). 2nd Prgr: 23.15–07.20 on 3945/7230kc (Tokyo) – Ann: "Okiki no Hoso wa Nihon Tampa Hoso desu". V. by QSL-card.
Nippon Electric Co: 3 × 50kW, 6 × 10kW, 3 × 3/5kW, 7 × 1kW + 8 low power mw-tr's and various studio equip. to 19 st's, sw-tr's to Nihon Shortwave Broadc. Co.

FM-TOHKAI (Exp. st. of Tohkai Univ.)
ADDR: Tomigaya, Shibuya, Tokyo.
STATION (System: NEC): FM 84.5Mc 3.25kW – **HOME SCE:** 20.30–15.30. **N:** 22.30, 03.00, 06.00, 08.00 – V. by QSL-card or letter. Records accepted.

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Tokyo Office: 2-chome, Yuraku-cho, Chiyoda-ku, Tokyo

FAR EAST NETWORK (AFRTS)

The network serves the members of the US-Forces serving in the F. East – **Authority:** The st's in Japan broadcast by authority of the Commander, US Forces, Japan, in cooperation with the Japanese Radio Regulatory Bureau. St's are linked by land line, and operated 24 h daily – **ADDR:** Headquarters, Far East Network, APO 67, San Francisco. **Te:** Tokyo 516-6-2234 – **L.P:** Chief: Lt.Col. E. T. Pardee. Lt.Col. Dir. Prgr: J. F. Buey. Dir. Tec: H. Yaskal.

STATIONS: °=Short Wave.

	kc	kW		kc	kW
Tokyo	°810	10	Chitose	1570	0.25
Iwo Jima	1500	0.1	Sasebo	1570	0.25
Itazuke	1550	2.5	Misawa	1580	0.25
Wakkanai	1550	0.1	Twakuni	1580	1

Short Waves: *=Tokyo.

3910 kc	76.73 m	10 kW:	08.40–22.40, 1kW: 22.50–08.30[1]
6155 –	48.74 –	10 – :	24 h[2]
11750 –	25.53 –	10 – :	22.30–08.40, 1kW: 08.50–22.20[3]
15260 –	19.66 –	1 – :	24 h[4]

N: Every h on the h.
[1] exc. Mon 15.05–19.58. [2] exc. Thurs 15.05–19.58. [3] exc. Tues 15.05–19.58. [4] exc. Wed 15.05–19.58. * Power and direction vary to meet point to point commitments for rebroadc. from AFRTS st's in Japan, Korea, Okinawa, Taiwan, Iwo-Jima.
ANN: "This is the Far East Network... Far East Network, Tokyo (Chitose, Itazuke etc.)" plus freq's on shortwave – V. by QSL-card – **PUB:** Master schedule (monthly).

JORDAN

L.T: GMT+2 h – **Pr.L:** Arabic, English.

THE BROADCASTING SERVICE OF THE HASHEMITE KINGDOM OF JORDAN (Go.)

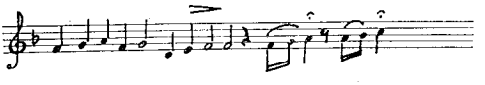
ADDR: P.O. Box 909, Amman. Cable: Broadcasting. **Te:** 27711.
L.P: Minister of Inf: H. H. S. Abuzeid. Dir. Gen. of Broadc: N. E. S. Aweidan. Asst. Dir. Gen. Eng: A. Bayat. Asst. Dir. Gen. Adm: G. Sunna. Dir. Tec: A. Bayat.

STATIONS: 677kc Jerusalem. Others, Amman.

kc	m	kW	kc	m	kW	kc	m	kW
800	375.0	100	9530	31.48	100	11870	25.27	100
677	443.0	20	9560	31.38	100	11970	25.06	100
6020	49.83	3	9740	30.80	100	15170	19.78	100
7155	41.92	100	11810	25.40	5	15345	19.55	100

HOME SCE: Amman: Arabic: 03.30–07.30 on 677/800/6020/7155/11810kc; 07.30–14.00 on 800/6020/9530/11810kc; 14.00–23.00 on 800/6020/7155/9530/11810kc; also on 677kc at 14.00–15.00 and after 17.00. **N:** 05.00, 06.00, 08.00, 12.00, 13.00, 16.00, 17.00, 19.00, 21.00, 22.00.
Jerusalem: English: 11.00–12.00, 15.00–17.00. **N:** 11.30–16.00. **Arabic:** 12.00–15.00, 17.00–23.00. **N:** 12.00, 17.00, 19.00, 21.00, 22.00.
FOREIGN SERVICE
So. American Sce: Arabic, Spanish: 23.00–01.00 on 15170 (stand by 11870, 15345kc) – **N:** Spanish 23.00, Arabic 00.30.
No. American Sce: Arabic, English: 01.15–03.15 on 9560 (stand by 9530kc) – **N:** English 01.16, Arabic 02.45.

ANN: Arabic: "Hunna Amman Ithaatul Mamlakate Al Urdoniete Al Hashemieh" – E: "This is Amman the Broadcasting Service of the Hashemite Kingdom of Jordan" – Sp: "Aqui Radio Amman, R.Dif. Del Reino Hashemita De Jordania".
INT-SIG: Clarinet, piano



V. by QSL-card or letter. Records accepted.
F.PL: Jerusalem 2×100kW on 677kc (1/3 65) 03.30–23.00; a new 100kW-tr. at Amman in parallel with 800kc (1/3 65).

The Marconi Company Ltd, GB, delivered: 1×7.5kW, 2×100kW sw-tr's, 1×100 kw mv-tr.

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KOREA (Peoples Democratic Republic)

L.T: GMT+9 h – **Pr.L:** Korean.

ADDR: Korean Central Broadc. Committee, Pyongyang.

STATIONS: Medium Waves:

585kc	660kc	785kc	860kc	1045kc	1150kc	1285kc
625 –	685 –	800 –	935 –	1080 –	1275 –	1335 –
655 –	725 –	850 –	1000 –	1120 –		

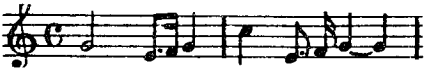
Short Waves:

kc	m	kc	m	kc	m	kc	m
2850	105.3	6141	48.85	6350	47.24	9752	30.77
3320	90.34	6195	48.43	6600	45.45	15240	19.69
5044	59.48	6250	48.00	7225	41.52	17850	16.89

HOME SCE. in Korean:
1st Prgr: 20.00–15.00 on 725, 785, 850, 860, 935, 1000, 1045, 1120, 1150, 1275, 1285, 1335kc.
2nd Prgr: 20.00–17.00 on 585, 625, 655, 660, 685, 800, 3320, 6250, 6350kc.

FOREIGN SERVICE: a) to Near & Middle East/Europe; b) to Latin America; c) to So. Ea. Asia; d) to Japan.
Chinese: 11.30–12.30 on 9752/15240kc – **English:** 19.00–21.00 on 7225/9752kc (a), 03.00–04.00 on 9752/15240kc (b), 10.30–11.30 on 9752/15240kc (c) – **French:** 21.00–22.00 on 7225/9752kc – **Japanese:** 04.30–05.30 on 7225/9752kc, 07.30–08.30 on 6141/7225kc, 13.00–15.00 on 5044/6141kc – **Korean:** 21.00–21.30 on 1080/6250kc, 10.30–11.00 on 785/2850/6600kc (d); 22.00–23.00 on 7225/9752kc (a), 02.00–03.00 on 9752/15240kc (b), 06.00–07.00 on 15240/17850kc (c) – **Russian:** 16.00–19.00 on 7225/9752kc, 09.00–10.00 on 6141/7225kc.

ANN: E: "This is the Korean Central Broadcasting Station, Pyongyang" – V. by letter.



KOREA (Republic of)

L.T: GMT+9 h – **Pr.L:** Korean.

THE KOREAN BROADCASTING SYSTEM (Go.)

ADDR: Overseas Broadcasting Station, Yejangdong 8, Chung-ku, Seoul. **Te:** 3-1696 – **L.P:** Bureau Dir: C. Hong. Chief Eng: I.K. Lee Overseas Sce. (HLSA): J.H. Lee. Home Sce: St. Dir. (HLKA): H.S. Lee. Dir. TV(HLCK): J.Y. Kim.

STATIONS:
Medium Waves: °=Short Wave.

Name	Call	kc	kW	Name	Call	kc	kW
Sogwipo	HLCF	540	1	Chulwon	HLCO	920	1
Chinju	—	560	1	Andong	HLCR	949	1
Chonju	HLKF	570	10	Cheju	HLKS	940	1
Masan	HLKD	570	1	Seoul	HLCA	°970	250
Seoul	HLSA	°600	100	Sokcho	HLCS	1030	0.3
Choonchun	HLKM	650	1	Namwon	HLKL	1030	1
Kwangju	HLKH	750	10	Hwachun	HLCG	1030	1
Seoul	HLKA	°710	100	Choongju	HLCH	1090	1
Taegu	HLKG	740	10	Samchok	HLCI	1120	1
Kangnung	HLKR	860	10	Wonju	HLCW	1190	1
Mokpo	HLKN	860	1	Wollungdo	HLCU	1320	0.3
Taejon	HLKI	880	1	Yosu	HLCY	1340	1
Pusan	HLKB	890	50	Pohang	HLCP	1420	0.3
Chongju	HLKQ	920	1				

Short Waves: 1) Seoul, 2) Suwon.

Call	kc	m	kW	Call	kc	m	kW
1) HLK50	2510	119.50	10	1) HLK30	7190	41.72	1
1) HLK51	3910	76.73	5	2) HLK5	9640	31.12	50
1) HLK22	5975	50.21	10	2) HLK6	11925	25.17	50
2) HLK31	6015	49.88	50				

HOME SERVICE:
1st Prgr. (Korean): 20.00–17.00 on 710/2510/3910/5975/7190kc. N: 21.00, 22.00, 23.00, 01.00, 03.00, 04.00, 06.00, 07.00, 08.00, 09.00, 10.00, 12.00, 13.00, 14.00.
2nd Prgr (Korean) 20.00–08.00, 10.00–17.00.

FOREIGN SERVICE:
On 970kc: 20.00–21.00, 12.30–16.00 – **Korean:** 20.00–21.00, 12.30–13.00, 14.00–15.30 – **Japanese:** 13.00–14.00 – **Chinese:** 15.30–16.00
On 9640kc: 21.00–23.00, 01.00–02.00, 05.00–05.30, 10.00–11.30, 12.00–14.00 – **Japanese:** 01.30–02.00 – **Chinese:** 22.00–22.30, 10.00–10.30, 13.00–13.30 – **Russian:** 22.30–23.00, 13.30–14.00 – **Korean:** 21.30–22.00, 01.00–01.30, 11.00–11.30, 12.00–13.00 – **English:** 21.00–21.30, 05.00–05.30, 10.30–11.00 (Gen. Sce.).

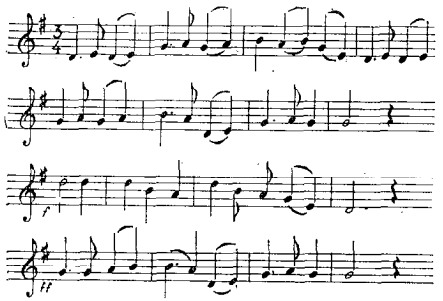
On 11925kc: 02.30–04.00, 06.30–07.30, 14.30–16.30.
English: 03.00–03.30, 06.30–07.00 (Gen. Sce), 15.30–16.00 (to So. Ea. Asia) – **French:** 07.00–07.30 (to Europe), 16.00–16.30 (to So. Ea. Asia) – **Spanish:** 03.30–04.00 (to Latin America) – **Chinese:** 15.00–15.30.
On 6015kc: 08.00–10.00, 12.00–15.00 – **Chinese:** 08.00–08.30 – **English:** 08.30–09.00 – **Japanese:** 09.00–10.00, 12.00–13.00 – **Korean:** 13.00–15.00.

N: English: 21.00, 03.00, 05.00, 06.30, 08.30, 10.30, 15.30 – **French:** 07.00, 16.00. **Spanish:** 03.30, **Chinese:** 22.00, 08.00, 13.00, 15.00. **Russian:** 22.45, 13.45. **Japanese:** 01.30, 09.00, 12.00.

DX PRGR (in English): Last Thurs: 03.15 on 11925kc, 05.15 on 9640kc, 06.45 on 11925kc, 10.45 on 9640kc, 15.45 on 11925kc, 21.15 on 9640kc.

ANN: Korean: "KBS Seoul Choong-ang bang song kuk che il bang song im ni da HLKA" (KBS this is the first network of Seoul Central Broadc. Station, HLKA). English: "This is the Voice of Free Korea, the Korean Broadc. System in Seoul, Korea".

INT-SIG: Foreign Sce: Korean Folk Music played as Yang-geum with orchestra:



V. by QSL-card or letter – **PUB:** pamphlet, pennant free to listeners. "Korean Radio & TV" (English) yearly.

Brown, Boveri & Co: 1×250 kw mw-tr. – Nippon Electric Co: 2×10 kw, 1×1 kw mw-tr.

CHRISTIAN BROADCASTING SYSTEM
(Non-comm. Independent)
FI: By donations from rlg. groups and interested individuals.

ADDR: 91 Chongno 2-Ka, Seoul. **Te:** 74-1761 – **L.P:** Dir: E. O. De. Camp. Mgr: Y. H. Choi. Dir. Tec: Y. H. Park.

STATIONS:	kc	m	kW		kc	m	kW
HLKY[1]	840	357	10	HLKP[3]	1400	214	1
HLKT[2]	1000	300	1	HLCM[5]	1400	214	1
HLCL[4]	1000	300	1	HLKY-FM	104Mc.		

[1] Seoul. [2] Taegu. [3] Pusan. [4] Kwangju. [5] Iri.

HOME SCE: Korean: 20.20–24.00, 02.30–14.30 – **N, Wrp:** 21.30, 21.50, 22.50, 02.50, 03.50, 04.50, 06.50, 08.50, 10.50, 12.50. **English:** (for UN Forces): Sun 23.00–03.00, 12.30–13.00 (Rlg. prgr) – **ANN:** "This is CBS, The Christian Broadc. System, HLKY, Seoul" – V. by letter. Records accepted – **F.PL:** St. at Taejon – **PUB:** Special Music prgr. (monthly).

RADIO STATION HLKX (Religious, Educational)
Operated by the Evangelical Alliance Mission, 2845 W. McLean Av, Chicago 47. Ill. USA – **FI:** By contributions and free-will offerings.

ADDR: Box 16, Inchon. **Cable:** Team Radio. **Te:** 2910 – **L.P:** St. Mgr: R. L. Livingston.

STATION (System: RCA): 1060kc 285m 50kW.

HOME SCE. in Korean, Chinese, Mongolian, English, Russian, Ukrainian: 20.00–23.00, 07.00–17.00 (Sat 06.00–Mon 17.00 without break) – **Korean:** 22.00–23.00(Sun 23.30), 21.00–23.00(not Sat), 17.00–20.00(Sun only). **N:** 22.55, 09.30(W) – **English:** Mon–Fri 07.00–09.00, Sat 06.00–13.00, Sun 23.30–09.00 – **Russian:** 11.00–13.00, 15.00–17.00 – **Chinese:** 20.00–22.00, 13.00–15.00.

ANN: "This is the Voice of Gospel" – Team Radio HLKX, Inchon Korea – a missionary project of the Evangelical Alliance Mission Chicago Ill" – V. by QSL-card or letter. Records accepted – **PUB:** Prgr.schedule free. HLKX-Echoes (quarterly).

RADIO STATION HLKU (Comm.).
ADDR: No. 3, 3-Ka, Choong-Ang Dong, Pusan.
STATION: 1035kc 1kW – **HOME SCE. in Korean:** W 21.30–01.30, 04.00–06.00, 09.00–14.30. Sun 21.30–06.00, 09.00–14.30.

AMERICAN FORCES KOREA NETWORK
ADDR: Headquarters U.S. Army Element, American Forces Korea Network: APO 301, S. Francisco, Calif, USA. **Te:** Yongsan 2495 – **L.P:** Commanding Officer: Lt. Col. Infantry: J. E. Melanson. Dir. Prgr: L. Murrow. Dir. Tec: T. J. Daugherty.

STATIONS: 24 h	kc	kW		kc	kW
Seoul[1]	560	5	Tongduchon[2]	1200	1
Taegu[6]	580	1	Osan[8]	1360	1
Munsan-Ni[4]	580	1	Unchon-Ni[7]	1400	1
Pusan[5]	780	1	Wonju*	1440	1
Chunchon*	1040	1	Kunsan[8]	1440	1
Kwanju*	1150	0.25	Taejon*	1480	0.25
Chesu-Do	1150	0.25	Pohang	1510	0.25
Kwandae-Ri	1160	0.25	Pyangyangdo	1510	0.25

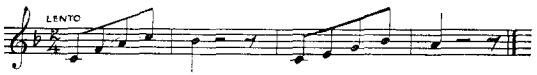
[1] "Vagabond", [2] "Bayonet", [3] "Comet", [4] "Cavalier", [5] "Homesteader", [6] "Kilroy", [7] "Gypsy", [8] "Mercury", * rel. 560kc.
N: Every h on the h – **ANN:** "This is the American Forces Korea Network". Local identification: "This is R. "Vagabond" in Seoul" etc. V. by QSL-card. Re. to Hqs. AFKN, APO 301, S. Francisco, Calif, USA. Rp.

KUWAIT
L.T: GMT+3 h – **Pr.L:** Arabic.

KUWAIT BROADCASTING & TELEVISION SERVICE (Go.)
ADDR: P.O. Box 397, Kuwait. **Cable:** Kuwait Broadcasting. **Te:** 35011 – **L.P:** Ministry of Guidance and Inf: H.E. Shaikh Mubarak Al-Abdullah Al-Ahmad Al-Sabah. Dir. Tec: R. Karrer (sound), A. Kesteloot (TV). St. Consultant: M. Ghosain.
STATION mw: 1/10/100kW; sw: 1/10/50kW (6055kc also 100kW)

kc	m	kc	m	kc	m	kc	m
1130	265.0	*4967.5	60.25	11940	25.12	17750	16.90
1345	223.2	**6055	49.55	°15150	19.80	21525	13.94

* Throughout the year; ** Wi. only; ° Sun only.
HOME SCE. in Arabic: 03.00–21.00 – **N, Wrp:** 03.00, 04.00, 05.00, 10.00, 13.00, 17.00, 19.00, 21.00 – **ANN:** "Huna l'tha't Al Kuwait" – V. by QSL-card. Records accepted – **F.PL:** 100kW sw-tr; One 100kW mw-tr, four 250kW sw-tr's, three 500kW mw-tr's (1965).
INT-SIG: Violin.



Brown Boveri, Switzerland delivered 4 sw-tr's 250kW – The Marconi Company Ltd, G.B. delivered two 100kW mw-tr's.
Wilh. Franz KG, Germany: EMT studio equip.

LAOS (Kingdom of)
L.T: GMT+7 h – **Pr.L:** Laotian, French.

RADIODIFFUSION NATIONALE LAO (Go.)
ADDR: Vientiane. **Cable:** Radio Lao. **Te:** 2457 – **L.P:** Dir. Gen: Bounthamaly. Dir. Tec: Viengsavan. Dir. Adm: B. Halsacda.
STATIONS: (System: Marconi) 370kc 219m 10kW
6130kc 48.94m 10kW – 7145kc 41.99m 1kW.
HOME SCE. in Laotian, French, Vietnamese: 23.30–02.00, 05.00–, 06.30, 10.00–14.00 – **N:** Laotian: 00.00, 06.15, 12.00, French: 05.45i 12.30. Vietnamese: 12.45–13.00.
ANN: F: "Ici Vientiane, R.diff. Nationale Lao" – **INT-SIG:** Music on Khéne, instrument of Bamboo – V. by letter. Rp.
F.PL: Nat. net. with 6 reg. st's.

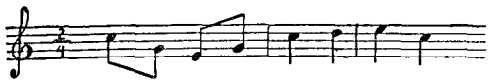
LEBANON
L.T: GMT+2 h – **Pr.L:** Arabic, French, English.

LEBANESE BROADCASTING STATION (Go.)
ADDR: R. Lebanon, Ministry of Orientation, Information and Tourism, Beirut. **Cable:** Radioliban. **Te:** 251880 – **L.P:** Dir. Gen: B. Dib. Dir. of Broadc: H. Al Hassan. Dir. Tec: J. Rouhayem. Dir. Prgr: N. Khoury.
STATIONS: 989kc 10kW, others 100kW.

836kc	359 m	–	5980kc	50.17m	– 9680kc 30.99m
989 –	303.3 –	–	9545 –	31.43 –	– 11770 – 25.49 –

HOME SCE: Prgr. I (Arabic): On 836kc: 04.30–07.30, 09.25–22.30. On 5980kc: 04.30–07.30, 14.15–18.20. On 5945kc: 09.30–14.00 – **N:** 05.00, 06.00, 07.00, 10.00, 11.00, 12.00, 16.00, 17.00, 18.00, 20.00, 21.45.
Prgr. II (on 989kc): **French:** 05.30–06.00, 11.00–12.30, 17.00–20.00 – **N:** 05.30, 11.30, 12.00, 17.45, 19.55 – **L.L.** English: Thurs 17.15, French: Wed 17.15 – **English:** 15.00–17.00. **N:** 15.00 – **Arabic, English, French:** 06.00–09.00, 12.30–15.00.
FOREIGN SCE: 18.30–20.30 on 11770kc to Africa in **English, Arabic, French;** 23.00–01.00 on 9680kc to So. America in **Portuguese, Arabic, Spanish;** 01.30–04.00 on 9680kc to No. America in **English, French, Arabic, Spanish.**

English: 18.30–19.00, 02.30–03.00. **French:** 20.00–20.30, 01.30–02.00. **Portuguese:** 23.00–23.30. **Spanish:** 00.30–01.00, 03.30–04.00. **Arabic:** 19.00–20.00, 23.30–00.30, 02.00–02.30 (East Coast US), 03.00–03.30 (West Coast US).
ANN: Arabic: "Houna Beyrouth, Dar al'Iza'a al Loubaniat" – F: "Ici Beyrouth, Station de Radiodiff. Libanaise" – E: "This is the English prgr. of the Lebanese Broadc. Station in Beirut" – Sp: "Aqui Beyrouth el Libano transmitiendo pare America del Sur (or: America del Norte)" – P: "Aqui Beirut, o Libano falando ao Brasil" – V. by letter. Rp – **INT-SIG:** Guitar (Opening notes from the Lebanese National Anthem)



Wilh. Franz KG, Germany: EMT studio equip.

MACAU (Portuguese China)

L.T: GMT+8 h – **Pr.L:** Portuguese, Chinese, English.
EMISSORA DE RADIODIFUSÃO DE MACAU (Go.)
ADDR: Macau. **Cable:** ERM. **Te:** 4491-25.
L.P: Dir. Gen: J.B.P. Baptista. Dir. Tec: F.A. de Macedo Printo.
STATIONS: 1200kc 0.25kW – **FM:** 98.0Mc 1kW (relay 1200kc) – **HOME SCE: Portuguese:** 23.00–00.30, 12.00–15.00 – **Chinese:** 09.30–11.30 – **ANN:** "Aqui Emissora de R.difusão de Macau" – **V.** by letter or QSL-card. Records accepted.

EMISSORA VILA VERDE (Priv.-Comm.)
ADDR: R. Vila Verde, Macau. **Cable:** Vila. **Te:** 3355.
STATIONS: 1005kc 298m 0.25kW – 735kc 408m 10kW. **FM:** 89.0Mc 5W (relay 735kc).
HOME SCE: Chinese: 23.00–16.00 on 735kc – **Portuguese:** 05.00–06.30, 12.00–16.00 on 1005kc.
ANN: P: "Aqui Emissora Vila Verde Macau" – **INT-SIG:** chimes – **V.** by letter or QSL-card.

MALAYA (Federation of Malaysia)

L.T: GMT+7½ h – **Pr.L:** Malay & English.
RADIO MALAYSIA (Go.)
FI: By state: Comm. Sce. was inaugurated Jan 1st 1962 – **ADDR:** Dept. of Radio, P.O. Box 1047, Kuala Lumpur. **Cable:** Broadcasts. **Te:** 23551 – **L.P:** Dir: Dol Ramli. Dep. Dir. and Contr. of Prgrs: Murtadza Za'ba. Asst. Contr. of Prgrs: Hashim Hassan. Chief Eng: Sen Gupta.

STATIONS: M=Malay, I=Indian, C=Chinese.

	kc	kW	L		kc	kW	L
Johore Bahru	570	10	M	Johore Bahru	940	10	E
Kuala Lumpur	590	20	M	K. Trengganu	960	0.3	M
Penang	660	10	M	Malacca	1010	10	M
Kota Bahru	700	10	M	Penang	1040	10	C/I
Ipoh[1]	740	2[4]	M/I	Kuala Lumpur	1070	20	C/I
Kuantan	810	0.3[4]	M	Kuantan	1140	5	E
Kota Bahru	840	10	E	Malacca	1160	10	E
Penang	860	10	E	Ipoh	1200	10	C/I
Kuala Lumpur	880	20	E	Johore Bahru	1220	10	C/I
Ipoh[2]	910	2*	E/C	Malacca	1280	10	C/I

[1] to be 550kc, [2] to be 740kc.

Short Waves: * Kuala Lumpur (Kajang). ** Penang.

kc	m	kW	L	kc	m	kW	L
4790**	62.63	10	M	7220	41.55	10	°
4985**	60.18	10	E	7280**	41.21	10	M
6025*	49.79	5	C	9515**	31.53	10	M
6105	49.14	100	°	9635	31.14	50	°
6135*	48.90	10	I	9750	30.76	50	°
7115	42.16	100	°	11900	25.21	100	°
7200**	41.67	10	E	° "Voice of Malaysia".			

HOME SCE. in Malay, English, Chinese, Indian.
Malay on 570/590/660/700/740/810/910/960/1010/**4790/7280/9515kc:** Mon, Wed: 22.30–02.30, 03.00–07.30, 09.00–16.30; Tues: 22.30–02.00, 04.30–16.30; Thurs: 22.30–02.00, 04.30–07.30, 09.00–16.30; Fri, Sat, Sun: 22.30–16.30 – **N:** 00.00, 01.00, 06.00, 09.30, 12.30, 14.30 – **Comm. Prgrs:** 23.00–01.30, 04.30–06.30 (Fri 06.00–08.00), 09.30–11.00 (Sat/Sun 01.30–04.30, 06.30–09.30), 12.00–13.15.
English on 840/860/880/910/940/1160/**4985/7200kc:** Mon–Thurs: 22.30–03.30, 05.30–06.30, 08.30–16.30; Fri: 22.30–01.30, 05.30–06.00, 09.30–16.30; Sat: 22.30–01.30, 05.30–16.30; Sun: 22.30–16.30 – **N:** 23.30, 00.30, 06.00, 09.30, 11.00, 14.00 – **Comm. Prgrs:** 22.30–01.30, 05.30–06.30 (Sun 01.30–03.30, 04.30–05.30), 09.30–10.30 (Sat/Sun 08.30–09.30), 12.30–14.30.
Chinese on 740/910/1040/1220/1280/**6025kc:** Mon–Fri: 22.55–02.30, 04.30–05.45, 08.00–16.30; Sat, Sun: 22.55–16.30 – **N:** 23.00, 23.30, 00.00, 00.30, 05.20, 05.35, 09.30, 12.30, 13.30, 14.30, 15.20 – **Comm. Prgrs:** 23.00–01.30, 04.30–05.45, 08.30–10.30 (Sat/Sun 08.00–08.30), 12.30–14.30.
Indian on 740/910/1040/1070/1220/1280/**6135kc:** Mon–Wed: 22.00–00.30, 05.45–07.30, 09.00–15.30; Tues, Thurs, Fri: 22.00–00.30, 02.30–04.30, 05.45–07.30, 09.00–15.30; Sat: 22.00–03.30, 05.45–15.30; Sun: 22.00–15.30 – **N:** 22.45, 06.00, 09.30, 11.30, 14.00 – **Comm. Prgrs:** 22.00–23.00, 05.45–07.30 (Sat/Sun 01.30–03.30, 07.30–08.00), 10.30–11.00, 13.30–14.30.

OVERSEAS SCE: "Voice of Malaysia".
23.30–01.00, 07.00–10.30, 14.30–16.30 on 6105/7115/9635/9750/11900kc. **English:** 00.00–00.30, 07.30–08.00. **N:** 00.00, 07.30 – **Indonesian:** 23.30–24.00, 08.00–08.30 (08.30–10.30, 14.30–16.30 on 9635/9750kc) – **Mandarin:** 00.30–01.00, 07.00–07.30. **N:** 00.30, 07.15. **ANN:** Malay: "Ini-lah R. Malaysia". E: "This is R. Malaysia" – **INT-SIG:** First bar of Nat. Anthem "Negara Ku" (Chimes) – **V.** by letter. Records accepted – **F.PL:** 3×10kW mw-tr's at Ipoh; 2×5kW mw-tr's at Kuantan (Dec 64) – **PUB:** Prgr.sched. for Home Sce. (Malay, English, Mandarin, Tamil) and Overseas Sce. (Indonesian, Mandarin, English) weekly.

The Marconi Company Ltd, G.B. delivered 2×2kW mw-tr's – Nippon Electric Co. Ltd., Japan: 50kW sw-tr.
Wilh. Franz KG, Germany: EMT studio equip.

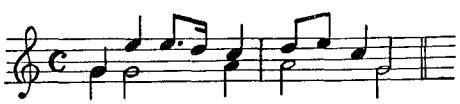
REDIFFUSION (MALAYA) LTD.
A subsidiary of Rediffusion Ltd. London (Comm) – **FI:** By subscription charges and adv – **L.P:** Man. Dir: G. H. Oldridge.
Kuala Lumpur: P.O. Box 570, 17 Pahang Rd. **Cable:** Rediffuse. **Te:** 81941. St. Mgr: P. J. M. Patten – Two simultaneous wired broadc. networks. Originating own prgr's and rel. "R. Malaysia", B.B.C. etc.
Penang: P.O. Box 559. **Cable:** Rediffuse. **Te:** 61761. St.Mgr: L. H. Adams. Two simultaneous wired broadc. networks. Originating own prgr's and rel. "R. Malaysia", B.B.C. etc – **Ipoh:** 127 Jalan Pasir Puteh, Ipoh, Perak. **Te:** 72173.

MONGOLIA

L.T: GMT+8 h – **Pr.L:** Mongolian.
ULAN BATOR RADIO (Go.)
ADDR: Radio Ulan Bator, Ulan Bator. **Cable:** Mongolian Radio.
STATIONS: Ulan Bator; * Tsanagur. ** Ulgei.

kc	m	kW	kc	m	kW	kc	m	kW
227	1322	150	**3972	75.51	20	5960	50.34	50
3215	93.30	60	4070	73.73	25	6135	48.90	25
*3222	93.10	5	5067	59.21	25	10885	27.60	25

HOME SCE: 1st Prgr: 22.55–15.05 on 227/5067/5960/10885kc – **2nd Prgr:** 09.00–14.05 on 4070/6135kc in Mongolian, Chinese, Russian Kazakh – **ANN:** "Ankhararai Ulanbatras jarsj baina" (Attention: This is Ulan Bator Calling) – **V.** by letter.
INT-SIG:



NEPAL

L.T: GMT+5.40 h – **Pr.L:** Nepali, Newari, Hindi, English.
RADIO NEPAL (Go.)
Fee: Rs 10/– – **AD:** between 07.20–08.20 – **ADDR:** Dept. of Broadc, His Majesty's Go. of Nepal, Kathmandu. **Te:** 11569 – **L.P:** Dir: P. M. Singh, Superintending Eng: K. B. Khatry, Prgr. Mgr: J. R. Sharma.
STATIONS (Systems: Philips, AWA):
9NBM 1500kc 200.0m 0.25kW – 9NB7 4600kc 65.22m 5kW – 7105kc 42.22m 5kW.
HOME SCE: 02.20–04.20, 07.20–09.20 (sw only), 13.20–15.20. **N. in English:** 03.00, 09.00. **N. in Nepali:** 02.50, 08.50, 15.05. **N. in Newari:** 04.05, 15.15.
EXTERNAL SCE: Sat 01.20–02.05 on 7105kc for Nepalese abroad.
ANN: Nepali: "Yo R. Nepal Ho". Newari: "Tho R. Nepal Kha". English: "This is R. Nepal" – **INT-SIG:** Instruments used: Conch-Shell, Violin, Piano and Jal-Tarang – **V.** by QSL-card. Rp – **F.PL:** New studio bldg. in 1966; 100kW sw-tr.

PAKISTAN

L.T: We. Pakistan: GMT+5 h. Ea. Pakistan: GMT+6 h – **Pr.L:** Urdu, Bengali.
RADIO PAKISTAN (Go.)
ADDR: 71, Garden Rd, Karachi-3. **Cable:** Digbrocast. **Te:** 70263 –

L.P: Dir. Gen: Zahur Azar. T. Pk. CSP. Dept. Dir. Gen (I): A. Nasri. Dept. Dir. Gen. (II): S. A. Hafeez. Dir. Prgr. Planning: H. Naseem. Dir. of Liaison: A. Butt. Adm. Officer: M. H. Shah.
ADDR: 23 Victoria Rd, Karachi-4. Cable: Cebrocast. Te: 54272.
L.P: Chief Eng: B. Ahmed. Dep. Chief Eng (TV): S. A. Aziz. Dep. Chief Eng: S. Shah. Maintenance Eng: S. Hasan. Installation Eng: Irfanullah. Research Eng: M. G. Baig.

STATIONS:

Medium Waves	kc	m	kW		kc	m	kW
Peshawar	580	517.2	10	Rangpur	1050	285.7	10
Lahore I	630	476.2	100	Lahore II	1090	285.7	10
Dacca II	690	435.1	100	Sylhet	1140	263	2
Quetta	750	400	10	Rawalpindi	1150	260.8	10
Karachi I	830	361.4	10	Dacca I	1170	256.4	5
Chittagong	870	344.8	10	Rajshahi	1080	277.7	10
Hyderabad	1010	297	10				

In addition to the freq's listed above experimental tr's are given from time to time on the following mw freq's registered for Pakistan: 570, 630, 640, 790, 1030, 1050, 1100, 1160, 1210, 1260, 1280, 1340, 1380, 1410, 1430, 1450, and 1510kc.

Short Waves: Karachi: II/III=50kW, IV/V=10kW.

kc	m	kc	m	kc	m	kc	m
2420	124.00	7200	41.67	9755	30.76	15255	19.67
3395	88.37	7225	41.52	11650	25.75	15270	19.65
3915	76.63	7263	41.30	11672	25.71	15275	19.64
3945	76.05	7270	41.26	11725	25.58	15285	19.63
3955	75.85	7275	41.24	11730	25.58	15325	19.58
4807	62.41	7280	41.21	11740	25.55	15335	19.56
4895	61.29	7290	41.15	11770	25.49	15360	19.53
4910	61.10	7295	41.12	11795	25.43	17710	16.94
4935	60.79	9484	31.63	11800	25.42	17715	16.93
4980	60.25	9545	31.43	11810	25.40	17720	16.93
5980	50.17	9560	31.38	11845	25.33	17745	16.91
5990	50.08	9595	31.27	11875	25.26	17750	16.90
6035	49.71	9600	31.25	11885	25.24	17755	16.90
6070	49.42	9614	31.20	11910	25.19	17760	16.89
6075	49.38	9630	31.15	11914	25.19	17770	16.88
6235	48.12	9640	31.12	11920	25.17	17835	16.82
6245	48.04	9645	31.10	15135	19.85	21570	13.91
7010	42.80	9695	30.94	15145	19.81	21580	13.90
7096	42.27	9705	30.91	15155	19.80	21590	13.90
7130	42.08	9737	30.81	15160	19.79	21630	13.87
7150	41.96	9740	30.80	15195	19.74	21690	13.83
7160	41.90	9750	30.77	15205	19.73		

Dacca II=7.5kW, Dacca III=10kW.

2350	127.66	6070	49.42	9605	31.23	15335	19.56
3325	90.23	6075	49.38	9614	31.20	15550	19.29
3950	75.95	6090	49.26	9615	31.20	17630	17.02
3955	75.86	6112	49.08	9645	31.10	17640	17.00
3965	75.66	6120	49.02	9695	30.94	17710	16.94
3985	75.28	7020	42.72	11610	25.87	17720	16.93
4790	62.62	7140	42.01	11725	25.59	17730	16.92
4807	62.41	7150	41.90	11730	25.58	17835	16.82
5035	59.58	7155	41.92	11885	25.24	17890	16.77
5970	50.25	7225	41.52	11890	25.23	21465	13.98
5980	50.17	7250	41.38	15160	19.79	21630	13.87
5995	50.04	7263	41.30	15265	19.66	21685	13.83
6015	49.88	7278	41.22	15270	19.65		
6035	49.71	7284	41.19	15285	19.63		

Labore II=1kW.

2400	125.00	4785	62.70	6075	49.38	9645	31.10
3335	89.96	4807	62.41	6138	48.88	11800	25.42
3395	88.37	6025	49.80	7225	41.52	11840	25.34
3915	76.63	6030	49.75	7270	41.26		
3950	75.95	6065	49.46	7284	41.19		

Peshawar II=10kW.

2320	129.31	4915	61.04
3241	92.56	5990	50.08
3935	76.24	6120	49.02
3940	76.15	7130	42.07
3965	75.67	9600	31.25

Rawalpindi II=10kW.

2460	212.95	7110	42.19
3259	92.53	4895	61.28
3945	76.05	9730	30.83

Quetta: 3915kc 76.64m – 4915kc 61.04m – 5970kc 50.25m 7110kc–42.19m.

MEDIUM WAVE PROGRAMMES:
Karachi (Urdu, English, Bengali): 01.30–03.30(Sun 06.30), 06.30–10.30, 11.30(Fri, Sat, Sun 12.00)–18.00.
Lahore (Urdu, English, Punjabi): 01.30–03.30(Sun 05.30), 06.30–08.30, 12.00–17.30.
Rawalpindi (Urdu, English, Pothoari): 01.30–03.00(Sun 05.30), 07.00–08.30, 11.30–17.00.
Peshawar (Urdu, English, Pushto): 01.30–03.30(Fri, Sun 04.00), 07.00(Fri, Sun 06.30)–08.30, 11.30–17.00.

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41.9 metres (7110 kc/s)
49 metres (6105 kc/s)
49 metres (6175 kc/s)
31 metres (9750 kc/s)

Language	*G.M.T.*	*News*
Indonesian	23.30—24.00	23.40
English	24.00—00.30	24.00
Mandarin	00.30—01.00	00.31
Mandarin	07.00—07.30	07.01
English	07.30—08.00	07.31
Indonesian	08.00—08.30	08.01

31 metres (9750 kc/s)
49 metres (6175 kc/s)

Indonesian	08.30—10.30	10.00
Indonesian	14.30—16.30	15.45

Hyderabad (Urdu, Sindhi): 01.30–03.30(Sun 05.00), 07.00–08.30, 12.00–17.00.
Quetta (Urdu, Balochi, Pushto): 01.30–03.30(Sun 04.30), 07.00(Sun 06.00)–08.30, 12.00(Sun 11.30)–17.30.
Dacca (Urdu, Bengali, English): 01.00–03.00(Fri, Sun 03.30), 07.00 (Sun 06.45, Fri 07.30)–09.00, 11.00–16.30.
Rajshahi, Chittagong (Urdu, Bengali, English): 01.00–03.00(Sun, Fri 03.30), 07.00(Fri 07.30, Sun 06.45)–09.00, 11.00–16.30.
Sylhet: 11.00–16.30.
Abbreviations: K=Karachi, L=Lahore, R=Rawalpindi, P=Peshawar, Q=Quetta, D=Dacca, H=Hyderabad, Ra=Rajshahi, C=Chittagong, S=Sylhet.
Nat. Music is broadc. daily from each st. of R. Pakistan on the chunks other than those reserved for fixed point items, spoken word items and N.

NEWS: English (Nat): 02.15–02.30, 08.10–08.20, 12.10–12.20, 15.00–15.15 K, L, R, P, H, D, Ra, C (at 12.10 also S, at 15.00 also Q, S). **English (Local)**: 12.25 L, R; 13.20 K.
Urdu (Nat): 02.00–02.15, 08.00–08.10, 12.00–12.10, 14.45–15.00 K, L, R, P, H, Q (at 02.00 & 14.45 also D, Ra, C; at 14.45 also S). **Urdu (Local)**: 12.10 Q; 12.20 L, R; 12.30 P; 12.55 D; 13.15 K.
Bengali (Nat): 01.45–02.00 K, R, D, Ra, C; 08.00–08.10 D, Ra, C; 12.00 D, Ra, C, S; 14.00 K, D, Ra, C, S. **Bengali (Local)**: 12.50 D.
Pushto (Nat): 02.50–03.00 P, Q; 08.20–08.30 P; 12.20–12.30 P, Q. **Pushto (Local)**: 12.30 Q; 13.45 P – **Sindhi**: 02.50–03.00, 12.20–12.30 H.
Balochi: 03.00–03.10, 13.00–13.15 Q – **Kashmiri**: 12.35–12.45 K.

SHORT WAVE PROGRAMMES

Karachi to We. Pakistan: 01.30–03.30 on 4980/6070kc, 07.00(Sun 06.30)–10.30 on 7275/9645kc, 12.00–12.30 on 6245/7130kc, 12.35–13.20 on 7010/9755kc, 13.00–13.10 on 4945/6140kc, 14.00–15.45 o 4945/6245kc.

01.30–01.45	Rlg. Prgr.	12.00–12.10	N. in Urdu
01.45–02.00	N. in Bengali	12.10–12.20	**N. in English**
02.00–02.15	N. in Urdu	12.20–12.30	N. in Pushto
02.15–02.30	**N. in English**	12.35–12.45	N. in Kashmiri
02.30–02.50	Rlg. Prgr.	12.45–13.00	Karachi Prgr.
02.50–03.00	N. in Pushto	13.00–13.10	N. in Balochi
03.00–03.10	N. in Balochi	13.10–14.00	Karachi Prgr.
03.10–03.30	Karachi Prgr.	14.00–14.15	N. in Bengali
07.00–08.00	Comm. Service	14.15–14.45	Nat. Hookup
08.00–08.10	N. in Urdu	14.45–15.00	N. in Urdu
08.10–08.20	**N. in English**	15.00–15.15	**N. in English**
08.20–08.30	N. in Pushto	15.15–15.45	Karachi Prgr.
08.30–10.30	Comm. Service		

Karachi to Ea. Pakistan: 01.30–02.50 on 9645/11885kc, 07.00(Sun 06.30)–08.20 on 17720/21590kc, 12.00–12.20 on 17760/21590kc, 14.00–15.45 on 9755/11672kc.

01.30–01.45	Rlg. Prgr.	12.00–12.10	N. in Bengali
01.45–02.00	N. in Bengali	12.10–12.20	**N. in English**
02.00–02.15	N. in Urdu	14.00–14.15	N. in Bengali
02.15–02.30	**N. in English**	14.15–14.45	Nat. Hookup
02.30–02.50	Rlg. Prgr.	14.45–15.00	N. in Urdu
07.00–08.00	Comm. Service	15.00–15.15	**N. in English**
08.00–08.10	N. in Bengali	15.15–15.45	Karachi Prgr.
08.10–08.20	**N. in English**		

ZONAL SERVICES:

Lahore	kc	Dacca	kc	Dacca	kc
01.30–03.30	3395	01.00–03.00	6015	01.00–03.00	9695
06.30–08.30	7225	07.00–09.00	7250	07.00–09.00	21685
12.00–13.45	6065	11.00–13.30	7020	11.00–13.00	17630
14.00–17.30	3950	13.45–16.30	3985	13.15–16.30	11610

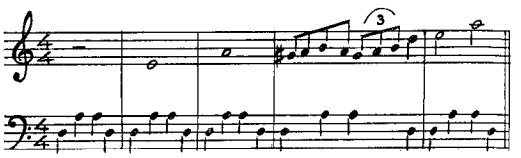
Rawalpindi: 10.45–11.45 on 7110kc – **Peshawar**: 01.30–03.30 on 3940 kc, 07.00–08.30 on 6120kc, 12.00–12.45 on 6120kc, 13.00–17.30 on 3935kc – **Quetta**: 01.30–03.30 on 3915kc, 07.00–08.30 on 7110kc, 12.00–13.45 on 5970kc, 14.00–17.30 on 3915kc.
ANN: "This is R. Pakistan, Karachi, Lahore" etc.

EXTERNAL SERVICES

Times	Sce.	kc	Language
00.30–01.15	So. Ea. Asia	11885/15335	**English**
03.45–04.45	So. Ea. Africa	11885/17745	Urdu/Gujrati
08.30–08.45	GOS (Far East)	17760/21590	**English**
08.45–09.30	Indonesian	17760/21590	Indonesian
09.45–10.30	Burmese	17760/21590	Burmese
10.45–11.45	So. Asia	11875/17760	Urdu
13.35–13.50	GOS (Mid. East)	11672/17765	
		15100/21590	**English**
16.00–17.15	Afghan/Persian	4980/7010	Afghan-Persian
16.00–16.45	Iranian	6235/7290	Persian
17.30–18.30	Arabic	11672/15285	Arabic
18.45–19.30	Turkish	9740/11672	Turkish
19.45–20.30	U.K.	9740/11672	**English**

N: English: 00.45, 08.30, 13.35, 20.00.

ANN: E: "This is R. Pakistan Calling Listeners in (name of target country)" – **INT-SIG**:



V. by QSL-card – **PUB**: "Pakistan Calling" in English, Urdu, Bengali (fortnightly). Monthly in Arabic, Persian, Burmese.

PHILIPPINES

L.T: GMT+8 h – **Pr.L**: English, Tagalog, Ilocano, Visayan.

RADIO CONTROL OFFICE, Dept. of Public Work and Communications, Manila.

STATIONS: Educ. and Go: 3), 6), 30). **Rlg**: 1), 4), 13). Other st's priv. comm. 2) is Go. owned, but broadc. comm. prgr's.
Location: Manila exc. where indicated.

Call	kc	m	kW	Name & h of tr.
1) DYB4	3277	91.55	0.1	Silliman Univ, Dumaguete City: 21.00–14.00
2) DZB2	3286	91.29	5	Philippine Broadc. Sce.
3) DZCA	3305	90.77	1	Nat. Civil Defense Adm: 08.00–11.00
4) DZB2	3345	89.68	2	Far East Broadc. Co: 21.00–15.00
5) DXB3	3945	76.05	0.5	Notre Dame Broadc. Corp, Cotabato City: 22.00–14.00
6) DZB6	4945	60.67	0.5	Nat. Teachers College: W 09.30–11.00, Sun 01.00–03.00
3) DZCA	5970	50.25	1	Nat. Civil Defense Adm: 08.00–11.00
4) DZH6	6030	49.75	2	Far East Broadc. Co: 21.00–17.30
1) DYH4	6055	49.55	0.25	Silliman Univ, Dumaguete City: 21.00–10.00
7) DZI7	6080	49.34	0.25	Voice of Manila: 21.00–16.00
4) DZF4	6120	49.02	50	Far East Broadc. Co: 22.00–23.30
2) DUH2	6170	48.62	10	Philipp. Broadc. Sce: 21.00–11.30
8) DUH9	7160	41.90	1	Univ. of the Philippines, Quezon City: 09.00–13.00
4) DZI9	7230	41.49	50/2	Far East Broadc. Co: 22.00–00.30, 13.30–17.30
9) DXH2	7280	41.21	0.5	Mindanao Broadc. System, Davao City: 23.00–08.00
4) DZH7	9505	31.56	50	Far East Broadc. Co: 12.30–16.30
1) DYH5	9630	31.15	75/100	SEARV, Dumaguete City.
4) –	9715	30.89	10/2	Far East Broadc. Co: 22.00–17.30
4) –	11740	25.55	2	Far East Broadc. Co: 22.00–03.00(Sun 08.30)
4) DZH8	11855	25.31	50/4	Far East Broadc. Co: 08.30–17.30
1) DYH6	11875	25.26	75/100	SEARV, Dumaguete City.
4) DZF2	11920	25.17	4/50	Far East Broadc. Co: 08.30–17.30
4) –	15285	19.63	10	Far East Broadc. Co: 01.00–03.00
4) DZH9	15300	19.60	2/10	Far East Broadc. Co: 22.00–15.15
4) DZF3	15385	19.50	50/3	Far East Broadc. Co: 22.00–13.30
1) DYH7	15420	19.46	75/100	SEARV, Dumaguete City.
1) DYH8	17715	16.93	75/100	SEARV, Dumaguete City.
4) DZI6	17810	16.84	2	Far East Broadc. Co: 22.00–12.00
1) DYH9	21470	13.97	75/100	SEARV, Dumaguete City.

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Medium Waves [0] Short Waves, [1] also FM.

Call	kc	kW	Call	kc	kW	Call	kc	kW
10) DZAA	540	0.5	19) DYQL	870	1	2) DXSM	1220	1
3) DZCA	°550	1	14) DXVM	870	1	18) DZAL	1230	1
11) DZCI	560	1	5) DXMS	°880	1	34) DZLT	1240	5
12) DYCB	570	10	13) DZXX	890	1	7g) DZHF	1250	1
13) DZBB	580	10	9) DXUM	900	1	35) DYVM	1260	0.5
14) DXDC	590	1	10) DZAD	900	0.5	25) DZBW	1270	0.5
7c) DYRC	°600	5	18) DYHF	910	1	18) DYRI	1280	5
15) DZAX	600	0.5	30) DXMT	930	10	15) DZBJ	1280	5
DXYZ	610	1	30) DZTD	940	5	31) DZEB	1290	1
16) DZAQ	620	50	19) DZXL	960	50	2) DXSO	1300	1
14) DXBC	630	1	7f) DYMB	970	1	15) DZRL	1300	1
17) DXAW	640	10	26) DZRC	970	1	18) DYML	1310	1
7a) DZRH	°650	10	31) DXJC	980	0.5	18) DYRK	1320	1
18) DYBC	660	1	12) DZYY	980	1	31) DXJJ	1330	0.5
19) DYPL	670	1	25) DXCE	980	0.5	36) DZYG	1330	1
4) DZAS	°680	10	14) DZAH	990	0.5	16) DZMM	1340	1
20) DXSS	680	1	DYRP	990	1	2) DXRP	1350	1
16) DZXN	690	1	16) DZBC	°1000	5	37) DZSG	1350	1
21) DXLM	690	0.5	17) DXJW	1010	1	37) DZYS	1350	1
15) DZTG	690	1	13) DYSS	1020	1	38) DYRL	1360	1
22) DXLY	700	5	4) DZFE	°1030	1	37) DZXQ	1360	5
2) DZFM	°710	10	7h) DYMS	1040	0.5	31) DZBS	1370	1
14) DXIC	720	1	16) DZRI	1040	5	30) DZTM	1380	10
23) DZGB	720	1	2) DZRP	1050	1	39) DXRM	1390	1
16) DZRD	730	1	25) DZGT	1050	0.5	19) DYXL	1400	5
5) DXND	730	0.5	4) –	1060	1	2) DYMR	1410	1
24) DYBR	730	1	16) DZRB	1060	5	8) DZUP	°1410[1]	1
9) DXMC	°740	5	18) DYWX	1070	1	33) DYRS	1420	1
25) DZQR	740	0.5	30) DZWS	1070	10	6) DZTC	1430	1
16) DYCU	750	10	32) DYVA	1080	1	13) DYOO	1440	1
26) DZCV	750	1	9) DXCM	1090	1	14) DXVM	1450	0.5
26) DXGS	750	1	30) DZMT	1100	10	40) DZBU	1460	10
7b) DZMB	°760	1	31) DZVS	1110	0.5	9) DXMM	1470	0.5
25) DZJC	770	1	33) DYRM	1120	1	41) DZBD	1480	0.5
27) DYRR	770	1	26) DZXT	1120	1	42) DYKR	1480	1
14) DXCC	780	1	18) DYOR	1130	1	18) DZGK	1480	1
28) DZAB	780	1	14) DZHP	1130	10	15) DXOG	1490	1
7e) DYVL	790	0.5	33) DYRD	1150	1	21) DZAF	1500	0.5
25) DZVV	790	1	12) DZMY	1160	1	2) DZEQ	1510	1
7d) DZPI	800	1	18) DYLL	1170	1	13) DYMR	1510	5
9) DXMM	810	1	22)	1170	0.5	13) DZEG	1510	1
7c) DYBU	°820	1	17) DXWW	1180	1	22)	1560	5
19) DZQL	830	5	2) DZRM	1190[1]	5	43) DZFU	1580	0.5
1) DYSR	°840	5	33) DYRH	1200	1	35) DYDR	1590	1
26) DZGE	850	5	18) DYRM	1200	1	1) DZCH	1600	10
29) DZST	860	1	18) DYOG	1210	1			

Short Waves:

1) **Philippine Christian R. Network** operates R. St's at Dumaguete City in cooperation with Silliman University – **Addr: DYSR:** Dumaguete City. **Cable:** Interchurch. DZCH: 1648 Taft Ave, Manila – **L.P:** Dir: C. Bernardez. Gen. Mgr: R. Pepito (DZCH). Dir. Tec: B. Magdamo (DYSR), A. Maniquis (DZCH). Prgr. Mgr: R. Milton (DYSR), W. Mathews (DZCH) – **D.Prgrs: N: English:** 22.45, 04.00, 04.15, 12.00. **Visayan:** 22.00, 10.00 – **Ann:** "This is DYSR, 840kc mw, and related sw st. DYH-4 in the 49 mb. The Voice of Christian Brotherhood in Dumaguete City, a project of the National Council of Churches in the Philippines, working in co-operation with Silliman University" – **V.** by letter. Records accepted – **F.Pl:** DZCH+FM to operate before end of 1964. St's DYH5/6/7/8/9 to operate as South East Asia Radio Voice early 1965 (see Hong Kong). 1kW st. at Kidapawan, Cotabato, Mindanao in 1965 – **Pub:** Prgr.schedule (quarterly), news sheet.

2) 5th Floor, GSIS Bldg, Manila. **Cable:** Philcast. **Te:** 3-24-15 – **Fi:** By state and adv – **L.P:** Gen. Mgr: F. Trinidad. Chief Eng: L. Quintos (studios), J. Dy (tr's). Prgr. Mgr: G. Tabuñar – **Home Sce: N. in English:** 22.45, 05.00, 10.30. **Asian Panorama:** Mon, Wed 12.30–12.45. **Philipiniana:** Mon–Fri 02.30–02.45. **N. in Tagalog:** 21.45, 04.45. (Relay st's: DZEQ Baguio City; DYMR Cebu City; DXPR Davao City; DXSM Jolo; DXSO Marami) – **Ann:** "This is PBS, the Philippine Broadc. Sce. PBS broadc. on DZFM, 710kc; 103.5Mc FM; DUH2 on Shortwave, 6170kc, 93.3Mc FM; 98.8Mc FM; DZEQ in Baguio, 1510kc; DYMR-Cebu, 1410kc and DZPR-Davao, 1350kc" – **V.** by letter. Rp. appreciated – **F.Pl:** Further 1kW relay st's. Overseas Broadc. Dept.

3) Independence Grandstand, Luneta, Manila – **Ann:** "You are listening to st. DZCA owned and operated by the National Civil Defense Adm. of the Philippines" – **V.** by letter. Re. in E.

4) **Fi:** FEBC is a non-profit, non-comm. missionary organization being sustained by free-will gifts and offerings from interested friends – **Addr:** Box 2041, Manila. **Cable:** Febcom. **Te:** 2-1057 – **L.P:** Dir: R. A. Reynolds. Tec. Dir: N. Blake. Prgr. Dir: R. Boettcher.

PHILIPPINE SCE: 20.55–15.00 on 680/3345/6030kc: 21.00 Philippine dialects, 21.45 **English,** 22.30 Tagalog, 23.00 **English,** 01.30 Tagalog, 02.30 **English,** 04.30 Chinese, 05.30 **English,** 08.30 Tagalog & Philippine dialects, 10.30–15.00 **English.**

Manila's Fine Music Station: 21.55–15.00 on 1030kc (all English). Shortwave st's operate in parallel as follows: 22.00–23.30 on 15300/15385/17810kc, 01.00–02.00 on 15385kc, 03.00–04.15 on 9715/11740/15300/15385/17810kc (Sun only), 09.00–12.00 on 15385/17810kc, 14.15–15.00 with 680kc (stereophonic broadc.).

New st. on So. Philippines in Marbel, Cotabato, 10.00–14.00 on 1060kc in Philippine dialects and English. Call sign: DX-- (last two letters not yet assigned). On-the-air date projected as Jan 1st, 1965.

OVERSEAS SCE:

Abbreviations: I=China; II=Malaysia/Indonesia; III=Australia/NZ/New Guinea; IV=Japan; V=Thailand/Laos/Cambodia/Vietnam; VI=India/Pakistan/Ceylon; VII=USSR; VIII=Europe.

a) English; b) Mandarin/Amoy; c) Indonesian; d) Thai/Lao/Burmese; e) Sinhalese; f) Tamil/Telegu/Hindustani; g) Gujarati/Marathi/Malayalam/Tibetan/Nepali; h) Mandarin; i) Russian; j) Amoy/Cantonese; k) Malay; m) Lao/French/Cambodian; n) Mandarin/Cantonese; o) Japanese; p) Thai; q) French; r) Russian; s) Vietnamese.

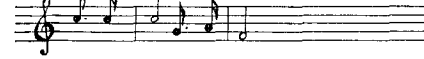
H. of tr.	Areas	Nov–Feb kc	March/April kc	L	N
22.00–23.30	I	6120/7230/9715	6120/7230/9715	b	
	II	9715/11740	11740	b	
22.00–23.30	III	17810	15385/17810	a	
	II/IV	15300	15300	a	
23.30–00.30	V	11855/15385/7230	15385/7230	a	23.30
	III	17810	17810	a	23.30
23.30–23.45	II	9715/11740/15300	9715/11740/15300	c	
23.45–01.00	V	9715/11740/15300	9715/11740/15300	d	
00.30–01.00	VI	15385	15385	e	
01.00–03.00	VI	15285	15285	f+g	
01.00–02.00	I/V/II	9715/11740/17810	9715/11740/17810	h	
01.00–02.00	V/VI	15385	15385	a	01.30
02.00–03.00	V/VI	15385	15385	a	
	IV/V/II	9715/11740/17810	9715/11740/17810	a	
03.00–08.30*	IV/V/VI	9715/15385	9715/15385	a	02.55
	II/III	15300/17810/11740	15300/17810/11740		04.00
					06.30
08.30–09.00	V/VI	15385	15385	a	
	IV/V/II	9715/11920/17810	9715/11920/17810	a	
09.00–12.00	V/II	15385/17810	15385/17810	a	11.00
09.00–10.30	III	11855	11855	i	09.00
09.00–10.30	I/V/II	9715/11920/15300	9715/11920/15300	j	
10.30–11.30	II	9715/11855/15300	9715/11855/15300	k	11.10
10.30–11.45	IV	11920	11920	o	
11.45–12.30	V	11920	11920	p	11.55
11.30–12.00	V	9715/11855/15300	9715/11855/15300	q	
12.00–12.30	V	9715/11855	9715/11855	s	
12.00–13.30	II	15300	15300	a	12.45
12.30–14.00	V/VI	9505	9505	a	12.45
12.30–13.30	V	9715/11920	9715/11920	m	
13.30–16.15	I	6030/7230/9715	6030/7230/9715	n	
	II	11920/15300	11920/15300	n	
14.00–15.30	V/VI	9505	9505	f	
15.30–16.30	V/VI	9505	9505	a	15.30
16.15–17.30	VII	6030/7230/9715	6030/7230/9715/ 11855/11920	r	
17.30–17.40	VIII	6030/7230/9715	6030/7230/9715/ 11855/11920	a	

* Sun only.

Short Wave Mbg: Mon 09.15 on 11855kc (for Australia, NZ), Wed 13.30 on 9505kc(for So. & So. Ea. Asia) – **Listeners Corner** (prgr. preview, tr. changes, Magazine prgr) Mon–Fri 23.45–24.00 on 15385kc (and 11855kc Nov–Feb only) to So. & So. Ea. Asia, 17810kc (for Australia/NZ); So. Asian Edition: 01.45–02.00 on 15385kc.

Ann: "This is the English Sce. of the FEBC transmitting from the Philippines" (quarterly). This is the English Sce. of the FEBC operating in the (metre bands)" (halfhourly). This is Manila calling. The English Sce. of the FEBC operating at (give freq's). The time is..." (hourly).

Int-sig: Part of hymn "Jesus Saves" played on vibraharp (bells).



V. by QSL-card and letter. Rp. preferred (3 IRCs for Air-mail) – **Pub:** Prgr. schedule free on request. "Signal" (every two months).

5) Cotabato City, Cotabato.

6) National Teachers College, P.O. Box 3032, Manila – **Ann:** E: "This is the Voice of Education" – **V.** by letter.

7) **MANILA BROADCASTING COMPANY – Addr:** Radio Center, 964 Taft Avenue, Manila. **Cable:** "Manbroadco". **Te:** 36451 – **L.P:** Gen. Mgr: Ira Davis. Dir. Tec: F. Dela Tuente – a) **The Voice of Philippines. D.Prgr:** 21.00–16.00 – b) **The Voice of Manila. D.Prgr:** 21.00–16.00 – c) **Cebu Broadcasting Company:** ("Voice of Cebu" & "Radio Cebu"). **Addr:** Lim Bon Fing Bldg, Cebu City. **D.Prgr:** 21.00–16.00 – d) **Radio Philippines. D.Prgr:** 22.00–14.00 – e) **The Voice of Leyte. Addr:** Red Beach, Palo, Leyte. **D.Prgr:** 21.00–15.00 – f) **Metropolitan Broadc. Co.** – g) **Your Business Station. D.Prgr:** 23.00–18.00 – h) **MBC, Leyte. D.Prgr:** 21.00–15.00. **V.** all st's verify by QSL-card. **Rp.**

8) *Dept. of Speech and Drama, Univ. of the Philippines, Diliman,* Quezon City – **L.P:** Dir. Gen: C. Fonacier. Dir. Tec: D.O. Baguio – "Views of the News": Wed 11.30. **Lessons:** Mon 10.00 (Spanish), Tues 10.00 (French), Thurs 10.00 (German – **Ann:** "You are listening to DZUP, the R.st. of the State Univ. broadc. from Diliman, Quezon City, 1410kc on your radio dial. 7.16Mc in the sw-band" – **Int-Sig:** electric chimes E-C (mi-do) – **V.** by QSL-card or letter.

9) 3rd Floor, DBP Bldg, C.M. Recto St, Davao City. **Te:** 252 – **L.P:** Dir. Gen: G.E. Torres – **Home Sce:** DXMC/DXUM: 21.00–15.00 in English, Tagalog, Cebuano; DXMM: 21.00–14.00 in English; DXH2: 23.00–08.00 in English; DXCM (Cotabato City): 21.00–15.00 in English, Tagalog, Muslim; DXRZ (Zamboanga City): 21.00–14.00 in English, Tagalog, Spanish, Chabacano, Muslim – **Ann:** "MBS-Mindanao Broadc. System, DXMC-Davao, DXUM-Davao, DX double M dial 810" – **Int-Sig:** *DXMC: A gong (musical instrument* used by Moros, natives of Mindanao) – **V.** by letter.

Medium Waves:

10) **Pacific Broadc. System, Inc,** Eden Hotel, Legaspi City. **D. Prgr:** 21.00–15.00 – 11) **R. Station DZCI,** Cabanatuan – 12) **Monserrat Broadc. System,** CBN Bldg, Aduana Str, Intramuros, Manila. **D.Prgr:** DZMY (Angono, Rizal): 21.00–17.00. DZYY-FM (Minala): 24 h. 13) **Republic Broadc. System,** E. de los Santos Ave, Diliman, Quezon City. **Cable:** "Bobstew". **Te:** 70-02-21 – **Home Sce. in English:** DZBB 21.00–16.00. DZXX 20.00–16.00. DYSS/DYOO 21.00–15.00. **Ann:** "This is R.B.S. the Republic Broadc. System... your station is DZBB (or DZXX) broadc. from Quezon City" – **V.** by letter. Re. in E. – 14) **R. Mindanao:** Cagayan de Oro City. **D.Prgr:** 22.00–14.00 in English Visayan on DXBC (Butuan City), DXIC (Iligan City), DXCC/DXVM (Cagayan de Oro City) – 15) **R. Philippines Network Inc,** Manila 16) P.O. Box 1344, Manila. **Te:** 8-46-84. **Home Sce. in English & Tagalog:** 21.00–16.00 – **Ann:** "This is ABS, largest Philippine Network" **V.** by QSL-card. Re. in E. – (DZAQ/DZBC: Manila. DZRI: Dagupan. DZRB: Naga. DYCB: Cebu) – 17) **Pioneer Station,** P.O. Box 121, Davao City – In English, Visayan: DXWW (Davao City): 22.00–15.00. DXJW (Zamboanga City): 22.00–14.00. DXAW (Davao City): 21.00–16.00. 18) **Visayan Broadc. System,** P.O. Box 41, Iloilo City – **D.Prgr:** DYBC (Cebu City): 21.00–16.00. DYHF (Iloilo City): 21.00–15.00. DYLL (Tacloban): 21.00–16.00. DYRI (Iloilo City): 21.00–16.00. DYWX (Bacolod City)/DYOR (Ormoc City)/DYRM (Dumaguete City)/DYOG (Calbayog City)/DZAL (Legaspi City)/DYML (Tagbilaran, Bohol)/DYRX (Roxas City): 21.00–16.00. 19) **Chronicle Broadc. Net,** CBN Bldg, Aduana Str, Manila. **Cable:** "CBN, Manila". **Te:** 30061. – **D.Prgr:** DYPL (Iloilo City)/DYQL (Bacolod City): 21.00–16.00. DZXL (Angono, Rizal): 21.00–15.00. DZQL (Angono, Rizal) 24 h. DYXL (Bacolod City): 21.00–16.00. DYZL-FM (Manila): 21.00–15.00. DXJW: 22.00–14.00 – 20) **Surigao Broadc. Net,** Surigao – 21) **Armed Forces of the Philipines** – 22) **Manila Times Publishing Co,** Manila – 23) **R. Station DZGB,** Legaspi City – 24) **East Visayan Net,** Tacloban City – 25) **Liberty Broadc. Network,** Dagupan City – 26) **Filippines Broadc. Network,** P.O. Box 23, Naga City, *Camarines Sur.* **D.Prgr:** 23.00–14.00 – 27) **R. St. DYRR,** Ormoc – 28) **R. Station DZAB,** 734 Laguna Str, Manila – 29) **Voice of the Catholic Philippines,** Univ. of Santo Tomas, Manila. 30) **Associated Broadc. Corporation,** Florentino Torres Str, Manila. **Te:** 3-73-01 – **L.P:** Gen. Mgr: Marcos C. Roces. Dir. Tec: R. Raymundo. Dir. Prgr: A. Rivera III (DZMT), Miss L. Linsangan (DZTM), L. Abando (DZWS) – **Home Sce:** DZMT 24 h, other st's 22.00–16.00. **N. in English:** Every h on the h – **Ann:** "DZMT-DZMT, first with the news, the finest in music". **V.** by letter. Records accepted. **Rp** – 31) **Oceanic Wireless Network, Inc,** Alliance Bldg, Rosario, Manila. **D.Prgr:** 22.00–16.00 on DXJC (Jolo, Sulo). DZVS (Sogorson). DZEB (Naga City), DZRL (Laoag), DXJJ (Zamboanga City), DZBS (Baguio City), DXOC (Ozamis City) – 32) **Agusan Broadc. Co,** Butuan City. **D.Prgr:** 21.00–16.00

33) Allied Broadc. Net, Dumaguete City – 34) **Voice of Quezon,** Luzonian Colleges, Lucena City – **D.Prgr:** in Tagalog, English: 21.00–15.00 – **V.** by QSL-card or letter. Re. to Tec. Dir. Records accepted.

35) **Central Philippines Broadc. Co,** 148 Colon Str, Cebu City – 36) **Vanguard Radio Net,** Cabanatuan – 37) **DZSG Sta. Catalina,** DZYS Santiago, Isabela. DZYQ Batangas – 38) **Bacolod Broadc. System,** Lacson Str, Bacolod City. **V.** by QSL-card or letter – 39) **Mindanao Broadc. Co,** Marawi City. 22.00–13.00 – 40) **Manily Daily Bulletin,** Shurdut Bldg, Intramuros, Manila. **Te:** 4-54-31. **D.Prgr:** in Tagalog: 21.00–16.00, 22.00–13.00. **V.** by QSL-card – 41) **R. Station DZBD,** Manila – 42) **R. St. DYKR** – 43) **Feati University,** Feati U. Bldg. Sta. Cruz, Manila – **D.Prgr:** in English, Tagalog: 01.00–13.30.

Nippon Electric Company Ltd, Japan: delivered to Philippine Brodc. Sce: 3 × 1kW, 1 × 5kW mw-tr's, 1 × 10kW sw-tr.

VOICE OF AMERICA RADIO STATION PHILIPPINES

ADDR: Voice of America, Washington 25, D.C. USA.
STATIONS:
Medium Wave: Malolos A: 920kc 326m 50kW: 11.00–16.30, 22.00–23.30 – Poro A: 1140kc 263m 1000kW: 11.30–16.30.
Short Wave: Malolos 7.5/50kW: 21.00–02.15, 09.00–16.30.

kc	m	kc	m	kc	m	kc	m
6160	48.70	7145	41.99	9605	31.23	15165	19.78
6185	48.50	7275	41.24	9665	31.04	15250	19.67
7135	42.05	9580	31.32	11785	25.46	17705	16.94

Poro 35/50/100kW: 21.30–02.30, 09.00–16.30.

kc	m	kc	m	kc	m	kc	m
6065	49.46	9530	31.48	11900	25.21	15210	19.72
6110	49.10	9560	31.38	11930	25.15	15250	19.67
6185	48.50	9590	31.28	15120	19.84	15315	19.59
7135	42.05	9615	31.20	15155	19.80	17735	16.92
7175	41.81	9655	31.07	15185	19.76	17830	16.83
7225	41.52	11805	25.41	15205	19.73	21570	13.91
7275	41.24						

D.PRGR: Medium Wave 920kc: 11.00–16.30 **English,** 22.00–22.30 ***English,*** 22.30–23.00 *Mandarin,* 23.00–23.30 **English.**
Medium Wave 1140kc: 11.30–12.30 Mandarin, 12.30–13.00 Vietnamese, 13.00–13.30 Laotian, 14.00–14.30 Thai, 14.30–15.00 Mandarin, 15.00–16.00 Vietnamese, 16.00–16.30 **English.**
Short Wave: See USA.
ANN: "This is the Voice of America Relay station in the Philippines".
INT-SIG: Choir of brass playing a 10 note version of "Columbia, the Gem of the Ocean". See USA – **V.** by QSL-card.
Continental Electronics, USA: 1000kW mw-tr.

ARMED FORCES RADIO & TV SERVICE: see USA.

RYUKYU ISLANDS

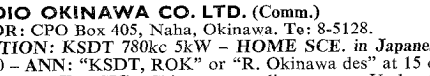
L.T: GMT+9 h – **Pr.L:** Japanese, Okinawan, English.

RYUKYUS BROADCASTING CORPORATION (Comm.)

ADDR: CPO Box 4, Naha, Okinawa. **Te:** 8-4161 – **L.P:** Pres: S. Zayasu. Dir. Tec: T. Washimine. Dir. Prgr: K. Kabira. Mgr(KSBK): Y. Nakamura.
HOME SCE: KSAR 740kc 5kW: 20.00–16.00 Japanese – KSBK 880kc 3kW: 20.00–16.00 English – **N:** Every h on the h.
ANN: KSAR: "RBC" or "Ryukyu hose des" every 15 or 30 min's. KSBK: "Radio 880" – **V.** by QSL-card.
Nippon Electric Co. Ltd, Japan, delivered 5kW mw-tr.

FAR EAST BROADCASTING CO. (Non-Comm, missionary)

FI: By freewill gifts – **ADDR:** CPO Box 55, Naha. **Cable:** Febcomb. **Te:** 78208 – **L.P:** Dir. J.C. Lentz. Dir. Tec: D. Hudson. Dir. Prgr's: T. Nash (KSAB), Matsukawa (KSDX), R. Kaufman (KSBU).
STATIONS: KSAB 1020kc 1kW – KSDX 1250kc 1kW – KSBU 1360 kc 100kW.
HOME SCE: KSAB(English): 21.00–14.00. **N, Wrp:** 21.55, 22.55, 23.55, 00.55, 02.45, 08.45, 11.45 – KSDX(Japanese): 22.00–14.00. **N:** 22.30, 23.30, 02.30, 03.30, 09.30, 12.30 – KSBU(Chinese): 21.00–06.00(beamed towards Shanghai).
ANN: Call letters every 15 or 30 min.
INT-SIG: Vibraphone – **V.** by QSL-card. **Rp.** preferred.



F.PL: sw-st. in the 80m.b. FM – **PUB:** Prgr.schedule free.

RADIO OKINAWA CO. LTD. (Comm.)

ADDR: CPO Box 405, Naha, Okinawa. **Te:** 8-5128.
STATION: *KSDT* 780kc 5kW – ***HOME SCE. in Japanese:*** 20.00–15.00 – **ANN:** "KSDT, ROK" or "R. Okinawa des" at 15 or 30 min. intervals – **INT-SIG:** Chimes or audio tones – **V.** by QSL-card.
Nippon Electric Co, Japan: 5kW mw-tr.

VOICE OF AMERICA RADIO STATION IN OKINAWA

ADDR: Voice of America, Washington 25, D.C. USA.
STATIONS:
Medium Wave: Okinawa-A 1178kc 255m 1000kW: 10.00–16.30.
Short Waves: Okinawa 35/100kW: 09.00–16.30, 20.00–01.30.

kc	m	kc	m	kc	m	kc	m
3940	76.15	6075	49.38	7155	41.92	11715	25.61
5975	50.21	6170	48.62	7235	41.47	15150	19.80
6010	49.92						

D.PRGR: Medium Wave: 10.00–16.00 Mandarin, 16.00–16.30 English. **Short Wave:** See USA.
ANN: "This is the Voice of America Relay St. on Okinawa".
INT-SIG: Choir of brass playing a 10 note version of "Columbia, the Gem of the Ocean". See USA – V. by QSL-card.

SABAH (Malaysia)

L.T: GMT+8 h – **Pr.L:** English, Malay, Chinese, Kadazan, Murut, Indonesian.

R. MALAYSIA SABAH (Go.)
ADDR: Dept. of Broadc. and Inf, Jesselton. **Cable:** Infor. **Te:** 2711.
STATIONS: VQA 930kc 5kW – VQA52 4970kc 60.36m 5kW.
HOME SCE: W 22.30–00.30, 04.00(Sat 03.00)–06.15, 07.45–15.00, Sun 22.30–06.15, 07.45–15.00.
English: 23.30–24.00(W), 01.30–04.00(Sun), 03.00–04.00(Sat), 05.00–05.30, 11.00–11.45, 13.30–15.00. **N:** 23.30*, 23.40, 01.30*(Sun), 01.40(Sun), 05.00*, 11.00(W), 14.00*. *=from R. Malaysia, Kuala Lumpur.
Malay: 00.00–00.30, 00.30–01.30(Sun), 05.30–06.00, 11.45–13.30 – **Chinese:** 23.30–24.00(Sun 00.30), 04.30–05.00, 08.00–09.30 – **Kadazan** (including Murut): 22.30–23.00(Sun 23.30), 04.00–04.30, 09.30–11.00 – **Indonesian:** 07.45–08.00, 08.00–11.00 on 750kc.

ANN: "This is R. Malaysia, Sabah" – **INT-SIG:** Opens with State Anthem and closes with Malaysian National Anthem Negaraku – V. by letter. Re to Head of Prgr's. R. Malaysia Sabah, Jesselton, Sabah, Malaysia – **PUB:** "R. Malaysia, Sabah Calling" (fortnightly).

SARAWAK (Federation of Malaysia)

L.T: GMT+8 h – **Pr.L:** English, Malay, Chinese, Dayak, Melanu.

R. MALAYSIA SARAWAK (Go.)
ADDR: Broadc. House, Kuching. **Cable:** Broadcasts. **Te:** 2345 – **L.P:** Dir. Broadc: P. Ratcliffe, O.B.E. Dir. Tec: Chung Lian Fatt.
STATIONS:

kc	m	kW	kc	m	kW	kc	m	kW
730	410.9	20/10	4835	62.05	20	7160	41.90	20
850	352.9	20/5	4950	60.60	20	7270	41.27	20
950	315.8	20/5	5052	59.38	20			

HOME SCE. in English, Malay, Chinese, Iban, Bidayuh:
Morning Sce: On 730/4950/7160kc: 23.00–00.30 in **Chinese, English, Malay.**
Mid-day Sce: On 730/4950/7160kc: Chinese: W 04.00–05.00; **English:** Mon–Fri 05.00–05.30, Sat 05.00–06.30, Sun 03.00–06.30 – **On 850/4835/7270kc:** W 04.00–05.00(Fri 05.30), Sun 03.00–03.45, 04.00–06.00. **Malay:** Tues, Wed 04.00–05.00, Fri 04.00–05.30, Sun 04.00–06.00. **Iban:** Mon, Thurs, Sat 04.00–05.00, Sun 03.00–03.45 – **On 5052kc:** Sun 04.00–05.00 Bidayuh.
Evening Sce: On 730/4950kc: 09.00(Sun 08.00)–14.30(Sat 15.00). **Chinese:** 09.00(Sun 08.00)–10.30, 12.00–13.30. **English:** 10.30–12.00, 13.30–14.30(Sat 15.00). **On 850/4835kc:** 08.30–14.00. **Malay:** 08.30–10.30, 12.30–14.00. **Iban:** 10.30–12.30. **On 5052kc:** 11.00–12.30 Bidayuh.

ANN: E: "This is R. Malaysia Sarawak". Malay: "Ini-lah R. Malaysia Sarawak". Dayak: "Tu R. Malaysia Sarawak" – **INT-SIG:** A musical phrase played on a native instrument, the Sapé, a musical phrase alternating between A and F. A 1kc tone is radiated for a 3 min's commencing 5 min's before each tr – V. by QSL-card – **PUB:** "R. Times" (fortnightly).

Wilh. Franz KG, Germany: EMT studio equip.

SAUDI ARABIA

L.T: GMT+3 h – **Pr.L:** Arabic.

SAUDI ARABIAN BROADCASTING (Go.) ;
ADDR: Ministry of Information, Airport Rd, Jeddah. **Cable:** Information Ministry. **Te:** 4171.
L.P: Minister of Inf: H. E. Sheikh J. Hijailan. Dep. Minister of Inf: H. E. Sheikh H. Bokari. Dir. Gen. of Broadc: Sheikh A. F. Ghazawi. Dir. Gen. of Press: Sheikh G. A. Al-Farag. Dir. Gen. of Adm: Sheikh A. Rahman A-Shiebani. Chief Eng: A. Andreou.
STATIONS: *=Jeddah. **=Riyadh.

kc	m	kW	kc	m	kW	kc	m	kW
*566	530.0	50	*9670	31.02	100	*11870	25.26	50
**647	463.6	1	**9720	30.86	50	*11890	25.23	50
*7170	41.84	50	*11855	25.31	50	**11950	25.10	50
**7220	41.55	50						

HOME SCE: General Arabic Prgr: Approx. 04.00–07.30, 10.00–14.55, 16.35–22.00 (h of tr. depends on sunset) – "Voice of Islam": Approx. 14.55–16.35.
FOREIGN SCE (on 9670kc): **Indonesian:** 13.00–14.00 (N. 13.45), **Urdu:** 14.00–15.00 (N. 14.15).
ANN: Gen. Arabic Prgr: "Al Izaa Al Arabia Al Seoudia". Voice of Islam: "Sawt Al Islam Min Makatah Al Mukarahmah". Indonesian: "Disini Saudi Arabia". Urdu: "Mecca Mukarama Ka Awas Saudi Arab Radio" – **INT-SIG:** Call to prayer (Az'an) played on flute – V. by letter, postcards. Records accepted – **F.PL:** Riyadh 1000kW project, two mw-tr's.
Wilh. Franz KG, Germany: EMT studio equip.

SINGAPORE (Fed. of Malaysia)

L.T: GMT+7½ h – **Pr.L:** Malay, Chinese, Tamil, English.

RADIO MALAYSIA SINGAPORE (Go.)
FI: By Go. and license payments – **Fee:** $ 12.00.
ADDR: Broadc. Division, Ministry of Culture, P.O. Box 1902, Singapore. **Cable:** Broadcast. **Te:** 50401 – **L.P:** Head of Broadc. Div: J. H. Duclos. Dir. Tec: G. Ang. Contr. Prgr's: C. V. Doral.
STATIONS:

kc	m	kW	Prgr	kc	m	kW	Prgr
630	476.2	10	E	6175	48.58	50	M
680	441.2	10	C	7170	41.84	22.5	C/T
790	379.5	10	M	7250	41.38	22.5	M
990	303.0	20	C/T	9590	31.28	10	E/M/C
4820	62.24	22.5	E	9635	31.14	50	C
5990	50.08	22.5	C	11940	25.13	50	E

E=English Sce, C=Chinese Sce, M=Malay Sce, T=Tamil Sce.
English Sce: On 630/4820kc: 22.30–16.30. On 9590kc: 05.00–05.15, 11.30–11.40, 11.45–12.00(Mon–Fri). On 11940kc: 22.30–01.30, 04.30–16.30 – **N:** 00.00, 00.45, 06.00, 11.30, 14.00, 15.30.
Malay Sce: On 790/7250kc: 22.30–16.30. On 6175kc: 22.30–01.30, 04.30–16.30 – **N:** 00.30, 05.30, 10.30, 13.30, 14.30, 15.30.
Chinese Sce: On 680/5990kc: 22.30–16.30. On 990/7170kc: 13.30–16.30. On 9635kc: 22.30–01.30, 03.30–07.30, 08.30–16.30 – **N:** 23.30, 00.00, 00.30, 01.00, 05.00, 05.05, 05.10, 05.30, 05.40, 05.45, 11.00, 12.00, 12.30, 13.15, 14.00, 14.30.
Tamil Sce: On 990/7170kc: 22.30–13.30 – **N:** 23.30, 06.00, 11.00, 13.00.
ANN: E: "This is R. Malaysia broadc. from Singapura". Malay: "Ini-lah R. Malaysia memanchar dare. Singapura" – **INT-SIG:** Chimes – V. by QSL-card. Rp. Records accepted – **PUB:** "Radio Weekly".

Marconi Co. Ltd (GB): 2×10kW mw-tr's – Gates Radio Co. (USA): 3×50kW sw-tr's. Nippon Electric Co. (Japan): 50kW sw-tr.

FORCES BROADCASTING SERVICE (British Mil.)
ADDR: British Forces BC Unit, GHQ FARELF, c/o GPO Singapore. **Te:** 2801 – **L.P:** St. Comm: W.J.O. Ettridge.
STATION (System: Marconi): 5010kc 59.88m 10kW.
D.PRGR: British Prgr: 06.30–12.30. **Gurkha Prgr:** 12.30–14.30.
ANN: "This is the British Forces Broadc. Unit, Singapore" – V. by QSL-card. Rp.

BBC FAR EASTERN STATION
ADDR: Caldecott Hill Studios, P.O. Box 434, Singapore. **Cable:** Febrocast. **Te:** 86321 – **L.P:** Head of Sce: G.A. Tree.

kc	m	kc	m	kc	m	kc	m
6110	49.10	9725	30.85	15310	19.60	21485	13.96
6175	48.58	11725	25.59	15360	19.53	21610	13.88
7110	42.19	11750	25.53	15420	19.46	21640	13.86
7120	42.13	11820	25.38	15435	19.44	21650	13.86
7135	42.05	11880	25.25	17755	16.90	21655	13.86
7260	41.32	11920	25.17	17790	16.86	21720	13.81
9560	31.38	11930	25.15	17870	16.79	21740	13.80
9580	31.32	11955	25.09	17880	16.78	25650	11.70
9690	30.96	15260	19.66	17890	16.77	25850	11.61

RELAYS OF GOS

h. of tr.	m.b.	h. of tr.	m.b.
No. & E. China, Korea & Japan:		15.45–16.00	41, 31
		16.00–16.50	49, 41, 31
09.15–11.00	25, 19, 16	23.00–23.15	31, 25
11.00–11.30	19, 16	**Indonesia:**	
11.30–12.00	19	09.15–10.30	41, 31, 25
12.00–13.15	31, 19	11.00–11.15	41, 31, 25
23.00–23.15	25	11.15–11.30	25
So. China, Hong Kong, Vietnam, Laos, Cambodia:		23.00–23.15	41, 31, 25
		Burma, Thailand:	
09.15–11.00	25, 19, 16	09.15–11.30	19, 16
11.00–11.30	19, 16	13.00–13.15	31, 25, 19
11.30–12.00	19	13.15–14.30	31, 25, 19
12.00–13.00	31, 19	14.30–15.45	41, 31, 25, 19
13.00–13.15	31, 25, 19	15.45–16.00	41, 31, 19
13.15–14.45	31, 25	16.00–16.50	49, 41, 31, 19
14.45–15.45	41, 31, 25	23.00–23.15	31

India, Pakistan, Ceylon:

	m.b.
13.00–14.00	25
14.00–14.15	25, 19
14.15–16.15	31, 19
16.15–16.50	31, 25, 19

Australia:

	m.b.
13.00–13.15	25

Relays of Asian Service:

	Language	H of tr.	m.b.
Japan:	Japanese	11.00–11.30	25
China, Vietnam	Standard Chinese	12.00–12.30	25, 19, 16
Laos, Cambodia:	Cantonese	12.30–12.45	25, 19, 16
Vietnam, Laos Cambodia:	Vietnamese	11.30–12.00	31, 25, 19
Thai		13.15–13.45	19, 25
Indonesia:	Indonesian	10.30–11.00	41, 31, 25
Burma, Thailand:	Burmese	13.45–14.15	25, 19
India, Pakistan, Ceylon:	So. Asian Reg*	15.45–16.15	25
	Urdu	14.15–15.00	25
	Hindi	15.00–15.45	25

*Sinhalese: Tues, Fri, Tamil: Sun, Thurs, Bengali: Mon, Wed, Sat.
Wilh. Franz KG, Germany: EMT studio equip.

SYRIAN ARAB REP.

L.T: GMT+2 h (Su: GMT+3 h) – **Pr.L:** French, Arabic.

SYRIAN BROADCASTING AND TELEVISION *(Go.)*

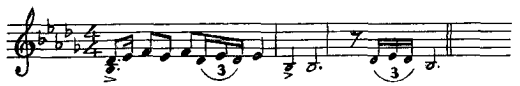
ADDR: Rue de la Victoire, Damascus – **L.P:** Techn. Dir: A. Ayas.

Stations:

kc	m	kW	kc	m	kW	kc	m	kW
566	530	300	953	31.50	30	11750	25.53	0.33
665	451	50	5287	56.75	0.33	11915	25.17	20
719	417	2	6165	48.66	20	15165	19.78	50
746	402	20	7390	40.60	7.5	15190	19.75	50
786	381	10	7700	38.90	0.33	17865	16.80	20
863	348	10	9555	31.40	20			

HOME SCE: Arabic: 04.00–08.00, 11.00–23.00. on 566/665/746/786/953kc, 19.00–21.30 on 719/863/9555kc, 04.00–23.00 on 5287/6165 (to Egypt/Libya)/7700/11750kc, 04.00–08.00, 11.00–14.00 on 11915kc to No. Africa), 22.00–23.00 on 9555kc.
English & French: 05.00–07.30 on 719/863/7390kc, 16.00–19.00 on 719/963kc. **N. in English:** 05.30, 17.00. **N. in French:** 06.30, 18.00. **Hebrew, German, Yugoslavian (mixed):** 14.00–15.00 on 863/9555kc – **Turkish:** 15.00–16.00 on 863/719/7390kc.

FOREIGN SCE: English & French (to Europe): 16.00–19.00 on 15165 kc. **N. in English:** 17.00–17.15. **N. in French:** 18.00–18.15.
Arabic/Spanish/Portuguese (mixed): 23.30–02.00 on 11915(No. America)/15190(So. America)/17865kc(Ce. America).
ANN: Arabic: "Houna Dimashk". E: "This is Damascus Calling". F: "Ici Damas". S: "Aqui Damasco". Hebrew: "Kol Damasseh" – **INT-SIG:** Guitar. V. by QSL-card and letter.



Telefunken AG, Germany: 50kW mw-tr (Damascus).
Wilh. Franz KG, Germany: EMT studio equip.

THAILAND

L.T: GMT+7 h – **Pr.L:** Thai.

THE THAI NATIONAL BROADCASTING STATION *(Go.)*

ADDR: Public Rel. Dept, Bangkok. **Cable:** Radio Thailand. **Te:** 48881 – **L.P:** Dir. Gen: Lt. Gen: K. Punnakanta. Dep. Dir. Gen: P. Hongsanand, Dr. W. Siwasariyananda. St. Mgr: I. Kanchanakooha. Dir. Tec: A. Pojanapisut. Chief, Overseas Broadc. Division. V. Ampaivorn.
STATIONS: Medium Waves:

Call	kc	m	kW	Call	kc	m	kW
HSK26	674	445.1	10	HSK30	1520	197.4	5
HSK27	815	366.9	2.5	**Short Waves:**			
HSK1	830	370.4	10	HSK4	4830	62.10	5
HSK28	856	350.4	10	HSK5	6070	49.20	1
HSK32	890	337.1	10	HSK5	6097	49.20	1
HSKK	910	329.7	1	HSK4	6160	48.70	1
HSKL	927	323.5	1	HSK7	7185	41.75	1
HSK22	1130	265.5	0.5	HSK7	7305	41.07	1
HSKQ	1140	263.3	10	HSK9	11910	25.18	50
HSK24	1210	247.9	5	HSK9	15385	19.50	50
HSK32	1256	239.5	1				

HOME SCE. in Thai: 00.00–01.00, 12.00–15.30 on 830/927/4830/6070/7305/11910kc. **N:** 13.30 – **Other languages: Chinese:** 02.30–02.45 on 856/6097kc. **French:** (Mon–Fri): 05.30–06.00 on 815/830/11910kc. **Laotian:** 01.05–04.10 on 815/830/4830kc; 13.00–13.30 on 856/6097kc. **Malay:** 06.30–06.45 on 856/4830kc.

OVERSEAS SCE: To No. America: 04.15–05.15 on 6160, 7305, 11910kc, 17.00–18.00 on 11910kc **N. in English** 04.25, 17.15 – **To Thai Forces in Korea, Vietnam, Cambodia:** 09.30–10.20 on 11910kc. **N. Thai** 09.32, **Vietnamese** 09.45, **Cambodian** 10.00 – **General Overseas Sce:** 10.25–11.57 on 6160, 7305, 11910kc. **N. English** 10.30, **Malay** 11.30, **Chinese (Kuoyu)** 11.45. – **Rel. Home Sce.** 13.00–14.00 on 11910kc. N. Thai.

ANN: E: "This is the Overseas Broadc. St. of Thailand". F: "Ici Radio Bangkok". Thai: "Thini Stani Vitayu Krajai Sieng hang Pra Thes Thai" – V. by letter. Re. to Overseas Broadc. Division, Public Relations Dept, Bangkok.

MINISTRY OF EDUCATION *(Go.)*

ADDR: Division of Educ. Inf, Ministry of Education, Bangkok. **Te:** 46139 – **L.P:** Dir. Div. of Educ. Inf: K.A. Meesook. Dir. Tec: P. Sapsomboon.
STATIONS:
1180kc 254.2m 2kW – 3202kc 91.69m 2kW – 6062kc 4948m 2kW.
HOME SCE. in Thai, English: Mon–Fri 02.00–07.00 School prgr's (in term time), W 11.00–13.00, Sun 09.00–13.00 (General Prgr's) (in Thai and occ. English). **N:** 11.35–12.55.
ANN: E: "This is the Educ. Broadc. St. of Thailand, broadc. on a frequency of..." – V. by letter – **F.PL:** 10kW for 1180kc (1965) – **PUB:** "R. Times" (in Thai).

THAI TELEVISION CO. LTD. *(Comm.)*

ADDR: Mansion B. Rajadamnern Ave, Bangkok. **Cable:** "Thaitevi". **Te:** 27952 – **L.P:** Dir. Gen: K. Punagunta. Man. Dir: P. Hongsanand. Chief. Eng: A. Rajprasit. Prgr. Mgr: Mrs. S. Siddhichai.

STATIONS: (System: Gates (mw)):
1500kc 200.0m 10kW Prgr. I – 5010kc 59.88m 1kW Prgr. I
1146kc 262.0m 10kW Prgr. II – 7105kc 42.22m 1kW Prgr. II
FM: 100.5Mc (Prgr. I), 94.5Mc (Prgr. II music), 96.5Mc (Prgr. III), 95.0Mc (Prgr. IV).
HOME SCE. in Thai: Prgr. I: 23.00–16.00 – **N. in Thai:** 00.00, 00.45, 01.00, 02.30, 03.35, 04.20, 05.40, 07.45, 08.30, 09.30, 10.40, 11.30, 13.00, 13.40, 15.00.

ANN: *"This is the regular Sce. of TTV Radio broadc. everyday on* the freq's of 1500kc, 5030kc and 100.5Mc on FM. Transmission comes to you every day, from six o'clock to eleven o'clock" – V. by letter. Records accepted – **F.PL:** 50kW – **PUB:** TTV Mirror (monthly).

OTHER STATIONS
Short Waves:

Call	kc	m	kW	Name
HSU90	3700	81.81	0.5	Royal Thai Airforce
HSU90	3805	78.85	0.5	Royal Thai Airforce
HS2PN	4755	63.09	0.3	Post & Telegraph St.
HS1JS	4875	61.54	0.5	Thai Army
HSVSS2	4890	61.35	0.1	Thai Army

Medium Waves:
HSU-01 1200kc 5kW 01-Broadcasting St: 00.00–07.00, 10.00–16.00 RTAF Donmuang AFB, Bangkok – **L.P:** Dir. Gen: Lt. Col. S. Thareechat. Dir. Tec: Maj. C. Maneesiri. **D.Prgr: N. in Thai:** 02.00, 03.00, 04.00, 11.30, 14.15 – **Ann:** "This is Zero-one Broadc. St. operating on a freq. of 1200kc from Donmuang AFB, Thailand" – V. by letter – **F.Pl:** 10kW.

TIMOR (Portuguese)

L.T: GMT+8 h – **Pr.L:** Portuguese.

EMISSORA DE RADIODIFUSÃO DO TIMOR PORT. *(Go.)*

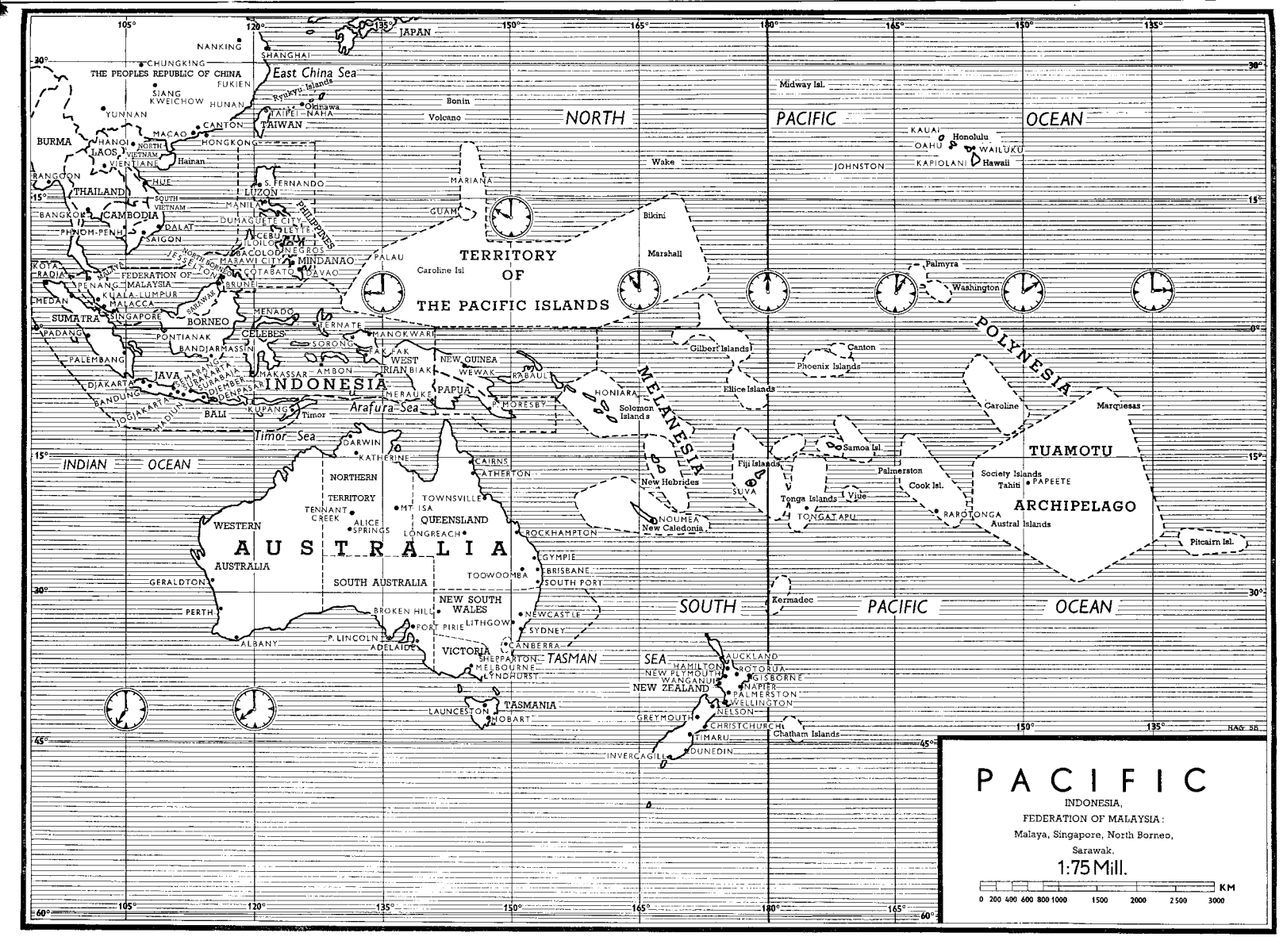
FI: By Go, adv, license payments – **Fee:** $ 100.–
ADDR: Dili. **Te:** 295 – **L.P:** Dir. Gen: D. S. M. de Carvalho Braga. St. Mgr: J. J. das Neves. Dir. Tec: L. P. Lourenco.
STATION (System: Gates): 3268kc 91.78m 1kW.
HOME SCE. in Portuguese: D 04.30–06.00, 10.00(Sun 07.20)–14.00 (Sat 14.30) – **ANN:** "Aqui Emissora de Radiodifusão de Timor Português, funcionando na banda dos 90 metros, freq. de 3268kc" – **INT-SIG:** Gong – V. by QSL-cards or letter. Records accepted.

TURKEY

L.T: GMT+2 h – **Pr.L:** Turkish.

TURKISH RADIO AND TELEVISION ESTABLISHMENT *(Indep.)*

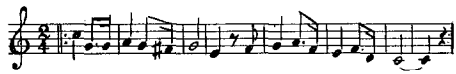
ADDR: Radyo-Televizyon Kurumu Genel Müdürlügü, Ankara. **Cable:** TRT – **L.P:** Dir. Gen: A. Öztirak. Dir. R. Ankara: O. Y. Hicyilmaz. Dir. R. Istanbul: S. Akgöl. Dir. R. Izmir: C. Ozankan. Chief for Transcription Sce: R. Gongur. Dir. Tec. Dept: H. Kamoy. Chief Tech. Councellor: M. Eke. Dir. Central Prgr. Office: M. T. Öngören.


PACIFIC
INDONESIA,
FEDERATION OF MALAYSIA:
Malaya, Singapore, North Borneo,
Sarawak.
1:75 Mill.
KM
0 200 400 600 800 1000 1500 2000 2500 3000
NORTH PACIFIC OCEAN
SOUTH PACIFIC OCEAN
INDIAN OCEAN
TASMAN SEA
TERRITORY OF THE PACIFIC ISLANDS
INDONESIA
AUSTRALIA
MELANESIA
POLYNESIA
TUAMOTU ARCHIPELAGO
East China Sea
Timor Sea
Arafura Sea
THE PEOPLES REPUBLIC OF CHINA
JAPAN
TAIWAN
BURMA
LAOS
THAILAND
CAMBODIA
PHILIPPINES
LUZON
MINDANAO
BORNEO
CELEBES
JAVA
BALI
PAPUA
NEW GUINEA
WEST IRIAN
NEW ZEALAND
TASMANIA
VICTORIA
NEW SOUTH WALES
QUEENSLAND
WESTERN AUSTRALIA
SOUTH AUSTRALIA
NORTHERN TERRITORY
Midway Isl.
Bonin
Volcano
Wake
Bikini
Marshall
Caroline Isl
Palmyra
Washington
Gilbert Islands
Canton
Phoenix Islands
Ellice Islands
Solomon Islands
New Hebrides
New Caledonia
Fiji Islands
Samoa Isl.
Palmerston
Cook Isl.
Tonga Islands
Viue
Caroline
Marquesas
Society Islands
Tahiti
Austral Islands
Pitcairn Isl.
Kermadec
Chatham Islands
Ryukyu Islands
Okinawa
Hainan
Timor
Hawaii
Honolulu
Kauai
Oahu
Wailuku
Kapiolani
Johnston
Mariana
Guam
Palau
Manokwari
Biak
Rabaul
Wewak
Merauke
Kupang
Makassar
Ambon
Ternate
Sorong
Fak Fak
Manila
Dumaguete City
Cebu
Iloilo
Bacolod
Negros
Marawi City
Cotabato
Davao
Brunei
Sarawak
Jesselton
North Borneo
Malaya
Kota Radja
Penang
Kuala Lumpur
Malacca
Singapore
Pontianak
Bandjarmassin
Palembang
Djakarta
Bandung
Jogjakarta
Madiun
Semarang
Surabaja
Djember
Denpasar
Hanoi
Vientiane
Hue
Bangkok
Phnom-Penh
Dalat
Saigon
Rangoon
Nanking
Shanghai
Chungking
Fukien
Siang
Kweichow
Hunan
Yunnan
Canton
Macao
Hongkong
Hanoi
Vietnam
Hue
Bangkok
Phnom-Penh
Saigon
Kota Radja
Medan
Padang
Palembang
Djakarta
Bandung
Jogjakarta
Madiun
Bali
Kupang
Makassar
Ternate
Manila
Cebu
Lette
Negros
Davao
Manila
Hanoi
Hue
Saigon
Bangkok
Phnom-Penh
Rangoon
Nanking
Shanghai
Chungking
Fukien
Hunan
Canton
Hongkong
Taipei
Naha
Okinawa
Hainan
Bonin
Volcano
Midway Isl.
Wake
Johnston
Kauai
Oahu
Honolulu
Wailuku
Kapiolani
Hawaii
Palmyra
Washington
Canton
Phoenix Islands
Gilbert Islands
Ellice Islands
Caroline
Marquesas
Samoa Isl.
Palmerston
Cook Isl.
Society Islands
Tahiti
Papeete
Tonga Islands
Viue
Tongatapu
Rarotonga
Austral Islands
Pitcairn Isl.
Fiji Islands
Suva
Noumea
New Caledonia
New Hebrides
Kermadec
Chatham Islands
Darwin
Katherine
Cairns
Atherton
Townsville
Mt. Isa
Tennant Creek
Alice Springs
Longreach
Rockhampton
Gympie
Brisbane
Toowoomba
South Port
Geraldton
Perth
Albany
Broken Hill
Port Pirie
Lithgow
Newcastle
Sydney
Canberra
P. Lincoln
Adelaide
Sheppartown
Melbourne
Lyndhurst
Launceston
Hobart
Auckland
Hamilton
Rotorua
New Plymouth
Wanganui
Gisborne
Napier
Palmerston
Wellington
Nelson
Greymouth
Christchurch
Timaru
Dunedin
Invercagill
105° 120° 135° 150° 165° 180° 165° 150° 135°
30° 15° 0° 15° 30° 45° 60°
HAG 58

STATIONS: Ankara = Main St. Other: Reg. st's.

	kc	m	kW		kc	m	kW
Ankara	182	1648	240	Istanbul	963	311.6	2
Istanbul	701	428.0	150	Izmir	1033	290.4	2
Van	6025	49.79	0.3	Ankara	1063	282.2	2
Izmir	6085	49.30	0.5	Adana	1133	264.8	2
Erzurum	7650	39.21	1	Kars	1165	258.0	2
Diyarbakir	9760	30.74	0.3	Ganziantep	1242	242.0	2
Iskenderun	9770	30.70	0.3	Antalya	1295	231.7	2

HOME SCE:
Ankara: Mon–Fri: 04.27–08.00, 09.57–13.00, 14.57–22.00. Sat: 04.27–08.00, 09.57–22.00. Sun: 04.57–22.00. N: 06.00, 11.00, 17.00, 20.45. **Istanbul:** Mon–Fri: 05.30–08.00, 10.00–13.00, 15.00–22.00. Sat: 05.30–08.00, 10.00–22.00. Sun: 05.30–22.00. N: 06.00, 11.20, 18.00, 21.00. **Van:** D: 05.57–07.00, 12.57–16.30. **Izmir:** W: 05.28–07.00, 10.28–13.00, 14.58–21.30. Sun: 06.58–13.00, 14.58–21.30. N: 11.30, 18.00, 20.45. **Erzurum:** W: 04.58–06.30, 09.58–11.30, 15.58–20.00. Sun: 04.58–08.00, 09.58–12.00, 15.58–22.00. N: 06.00, 11.00, 18.00. **Diyarbakir:** D: 09.57–11.00, 16.57–19.00. **Iskenderun:** D: 09.57–11.00, 16.57–19.00.
Medium Waves:
Istanbul: 15.58–22.00 – **Izmir:** as 6085kc – **Ankara:** 15.00–21.00 – **Adana:** W: 05.27–07.00, 10.27–12.00, 15.57–20.00. Sun: 05.27–08.30, 09.57–12.00, 15.57–20.00 – **Kars:** 05.27–07.00(Sun 08.00), 09.58–11.30, 15.58–20.00 – **Ganziantep:** W: 05.27–07.00, 10.27–12.00, 15.27–20.00. Sun: 06.27–09.00, 10.27–12.00, 17.57–22.00 – **Antalya:** 05.28–07.00(Sun 08.00), 10.28–12.00, 16.58–21.00.
ANN: "Burasi Ankara" (This is Ankara) or "Burasi Istanbul Radyosu" (This is Radio Istanbul).
INT-SIG: R. Ankara and R. Istanbul:



FOREIGN SERVICE

STATIONS: [1] to Eu. [2] to Balkan, N. East. [3] to India.

Call	kc	m	kW	Call	kc	m	kW
TAS	7285[1]	41.18	100	TAU	15160[1]	19.79	100
TAT	9515[2]	31.53	20	TAQ	15195[2]	19.74	20
TAP	9745[2]	30.78	20	TAV	17820[3]	16.83	100

Nov/Feb. March/April

Arabic	kc	kc	Persian	kc	kc
15.30–16.00	9745	15195	13.30–13.45	9515	17820
17.30–18.30	9745	15195	15.00–15.30	9515	17820
Bulgarian			**Polish**		
17.00–17.15	9745	15195	17.45–18.00	7285	15160
English			**Rumanian**		
13.45–14.15	9515	17820	16.45–17.00	9745	15195
22.00–23.00	7285	15160	**Serbo-Croat**		
French			17.15–17.30	9745	15195
19.30–20.00	7285	15160	**Turkish**		
German			03.30–07.00	9745	15195
18.00–18.30	7285	15160	11.00–12.45*	7285/ 9745	15160/ 15195
Greek					
16.30–16.45	9745	15195	17.00–17.30	7285	15160
Hungarian			18.45–19.45	7285/ 9515	7285/ 17820
17.30–17.45	7285	15160			
Italian			**Urdu**		
20.30–21.00	7285	15160	14.15–14.45	9515	17820

* to So. & So. Ea. Asia – N. at the beginning of every transmission.
ANN: E: "This is R. Ankara". F: "Ici postes émetteurs de Turquie, R. Ankara a ondes Courtes émettant sur une longueur d'onde de...". G: "Hier ist der Türkische Landessender Ankara, auf Kurzwelle...". I: "Qui R. Ankara, Stazione ad onde corte, de...". Turkish: "Burasi Türkiyeradyo yayin postalari, kisa dalga Ankara Radyosu".
INT-SIG: As for Home Sce – V. by QSL-card – F.PL: Erzurum 245kc, Izmir 971kc 100kW, Diyarbakir 209kc 250kW (1965) – PUB: Prgr. schedule (weekly) for R. Ankara, R. Istanbul, R. Izmir, R. Antalya, R. Adana, R. Ganziantep.
The Marconi Company Ltd, G.B, delivered 2 × 120kW lw-tr's (Ankara). – Wilh. Franz KG, Germany: EMT studio equip.

Your help is needed . . .
to make the WRTH even better, and that is why we ask all of our readers—listeners and radio-stations—to send in corrections and new schedules, thus enabling us to offer you an **improved** WRTH 1966 . . .

TECHNICAL UNIVERSITY OF ISTANBUL (Go.)
ADDR: Teknik Universite, Elektrik Fakültesi, Yüsek Frekans Teknigi Kursüsü, Istanbul. **Te:** 482250.
HOME SERVICE: I.T.U. = Istanbul Teknik Üniversitesi.
6299kc 47.62m 1kW: 18.15–20.00 (exc. Sat).
7018 – 42.74 – 0.5 – : 18.15–20.00 (exc. Sat).
FM: 99.5Mc 0.25kW: 18.15–20.00 (exc. Sat).
Frequencies are shifted slightly if interference occurs.
D.PRGR: National (Turkish) and **Classical music:** Sun, Tues, Thurs 18.15–18.45.
ANN: Turkish: "Burasi Istanbul Teknik Üniversitesi Radyosu". E: "Here is the R. Station of the Technical University of Istanbul" – **INT-SIG:** "Turkish March" by Mozart – **V.** by letter. Rp.

ISTANBUL UNIVERSITY (Go, Educ.)
FI: By Go. appropriation – **Fee:** 20 Turkish £ – **ADDR:** Fen Fakültesi, Tatbiki Fizik Laboratuari, Istanbul. **Te:** 222808 – **L.P:** Dir. Gen: Prof. Dr. F. Yeniçay. Gen. Mgr: Y. Kaini. Dir. Tec: S. Sinman.
STATION: 7100kc 42.25m 1.6kW.
D.PRGR'S in Turkish, English, French: 16.00–18.00 (Music only).
ANN: "Burasi 42 m dalgaboyu, üzerinden tecrübe yayini yapan Istanbul Üniversitesi Fen Fakültesi Radyosu" (This is the Experim. R. St. of Istanbul University, Faculty of Science broadc. on 42 m) – **V.** by letter – **F.PL:** Increase power and second sw-prgr – **PUB:** Prgr. schedule (fortnightly).

VIETNAM (Democratic Republic)

L.T: GMT + 7 h – **Pr.L:** Vietnamese.
THE VOICE OF VIETNAM (Go.)
ADDR: No. 58, Quan-Su Street, Hanoi. **Te:** 4134 – **L.P:** Dir. Gen: T. Lâm. Dir. Foreign Prgr's L. Quy.:
STATIONS: *Hanoi.*

kc	m	kc	m	kc	m	kc	m
1010	297.0	5950	50.42	9840	30.49	15044	19.94
1200	250.0	7540	39.80	11760	25.51	15116	19.85
4684	64.05	9760	30.74	11840	25.34		

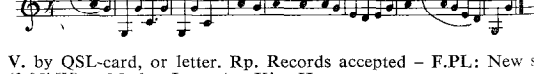
HOME SCE: 21.50–23.45, 03.30–05.50, 09.00–15.45 on 1010/4684/5950/7540kc – **N:** 22.30, 04.00, 04.30, 11.30, 13.00, 13.45.
FOREIGN SCE: English: 04.30–04.45 on 1200/9840/11840kc, 10.00–10.30 on 1200/9760/9840/11760/11840/15116kc, 13.30–14.00 on 1200/9840/11840kc, 15.30–16.00 on 1200/9760/9840/11760/11840/15116kc, 16.00–16.30 on 1010/4684/9760/9840/11840/15044/15116kc.
ANN: E: "This is the Voice of Vietnam, broadc. from Hanoi, Capital of the Democratic Republic of Vietnam" – **V.** by QSL-card. Prgr. schedules, pamphlets, pennants free. Records accepted.

VIETNAM (Republic)

L.T: GMT + 8 h – **Pr.L:** Vietnamese.
RADIO VIETNAM (Go.)
ADDR: 3 Phan-Dinh-Phung Str, Saigon. **Te:** 25935. **Cable:** "VTVN". **L.P:** Dir: Nguyen-Ngoc-Linh. Dir. Tec: Vo-Van-Hue. Dir. Prgr: Nguen-Xuan-Vien. Dir. Adm: Tran-Van-Du.
STATIONS: Saigon (Systems: Gates, TRT, CFTH, Collins, TEMCO):

kc	m	kW	Prgr.	kc	m	kW	Prgr.	kc	m	kW	Prgr.
610	491	20/60	B	1360	220	1	AFRS	7265	41.29	5	B
740	405	10/10		4877	62.51	20	A	9620	31.19	50	A
870	345	50/200	A	6165	48.66	20	A	9755	30.76	1	C
1090	275	1/1	C	7245	41.41	20	A				

HOME SCE. Prgr. A (Vietnamese): 22.00–16.00 **N:** Every h on the h.
Prgr. B (Vietnamese, Chinese): 22.00–01.30, 03.30–05.00, 09.00–15.30 – **Vietnamese:** 22.00–23.30, 03.30–05.00, 09.00–12.30, 13.30–15.30 – **Chinese:** 23.30–01.30, 12.30–13.30.
Prgr. C: (Vietnamese, English, French, Thai, Cambodian: 21.58–00.30, 04.00–06.00, 10.00–15.00.
Vietnamese: 22.00–22.30 – **French:** 22.45–23.30, 04.30–05.00, 11.15–12.30, 13.00–15.00 – **English:** 23.30–24.00, 05.00–05.30, 12.30–13.00 – **Thai:** 00.00–00.30, 10.45–11.15 – **Cambodian:** 04.00–04.30, 10.00–10.45 – **L.L (English):** 22.30–22.45, 05.30–05.45, 05.45–06.00.
AFRS Prgr. (in English only) 22.00–16.00.
ANN: Vietnamese: "Dây là Dài Tiêng Nói Núoc Viêt-Nam Công-Hôa phát thanh tú Saigon". F: "Ici VTVN, La voix de la république du Viet-Nam, émettant de Saigon". E: "This is VTVN, the Voice of the Republic of Viet-Nam broadcasting from Saigon" – **INT-SIG:** Cither solo.



V. by QSL-card, or letter. Rp. Records accepted – **F.PL:** New st's (0.05kW) at Mytho, Long An, Kien-Hoa.

RADIO AUSTRALIA

Daily Broadcasts in:

★ ENGLISH
★ INDONESIAN
★ FRENCH
★ JAPANESE
★ THAI
★ MANDARIN
★ CANTONESE
★ VIETNAMESE

Radio Australia is the Overseas Service of the Australian Broadcasting Commission

Address: G.P.O. Box 428G, Melbourne, Aust.

REGIONAL STATIONS (Systems: Gates, STC, RCA, TEMCO):

Location	kc	m	kW	Location	kc	m	kW
Huê	650	461.5	20/100	Dalat	1440	208.0	1/1
Banmethout	690	434.8	50/100	Banmethout	4810	62.37	1
Baxuyen	780	385.0	10/30	Dalat	6116	49.05	5
Quang Ngai	890	337.0	1/2	Huê	9670	31.02	5
Nhatrang	970	371.5	1/2	Nhatrang	9720	30.86	0.2
Quynhon	1250	240.0	1/3				

Huê: 22.00–00.45, 02.00–05.45, 08.00–15.00 – **Banmethout:** 23.00–24.00, 03.00–06.00, 10.00–14.00 – **Baxuyen:** 03.30–05.00, 09.30–12.00 – **Quang Ngãi:** 22.30–00.15, 03.30–05.15, 10.00–13.00 – **Dalat:** 22.28–01.15, 03.57–04.00, 08.58–13.45 – **Nhatrang:** 22.15–00.15, 02.00–05.45, 08.00–15.00.

YEMEN

L.T: GMT+3 h – **Pr.L:** Arabic.

RADIO SANAA (Go.)

ADDR: Sanaa – **L.P:** Dir. Gen: A. Humran. Dir. Tec: A. Abiad.

STATIONS: 881kc 10kW – 5950kc 50.42m 25kW – 15710kc 19.10m 10kW.

HOME SCE. in Arabic: 03.00–06.00, 11.00–15.00, 16.00–22.00 – **N:** 04.00, 12.00, 17.00, 19.45 – **ANN:** "Huna San'aa – **V.** by letter. Rp.

PACIFIC

AUSTRALIA (Commonwealth of)

L.T: Ea. Austr: GMT+10 h, So. Austr: GMT+9½ h, We. Austr: GMT+8 h – **Pr.L:** English.

AUSTRALIAN BROADCASTING COMMISSION (ABC) Constituted under the Broadc. and TV-Act 1942–63. The Australian National Broadc. Sce. prgr's are the responsibility of the ABC which, is responsible to the Postmaster General. The technical sce's in Radio and TV studios are provided by the ABC Engineering Dept; the tr's are operated by the Postmaster General's Department.

FI: By annual appropriation from the Commonwealth Go's budget. **ADDR: Head Office:** 264 Pitt St, Box 487 G.P.O, Sydney. **Cable:** ABCOM. **Te:** 20657.

L.P: Chmn: Dr. J. R. Darling, C.M.G, O.B.E. Gen. Mgr: Sir Charles Moses, C.B.E. Deputy Gen. Mgr: T. S. Duckmanton. Asst. Gen. Mgr. (Prgr): C. W. Semmler. Gen. Mgr. (Gen): A. N. Finlay. Contr. News: W. S. Hamilton. Contr. Tec. Sce's: V. Kenna. Dir. Publicity & Concerts: Charles Buttrose. Dir. Prgr's (Overseas): P. W. R. Homfray.

THE NATIONAL BROADCASTING SERVICE

MEDIUM WAVE SERVICE: [1]=Metropolitan. [2]=Regional.

Australian Capital Territory

Call	kc	kW	Location	
2CY[1]	850	10	Canberra	a)
2CN[1]	1540	2	Canberra	b)
New South Wales				
2CR[2]	550	50	Orange	a)
2ML[2]	560	0.2	Murwillumbah	a)
2FC[1]	610	50	Sydney	a)
2NU[2]	650	10	Tamworth	a)
2CO[2]	670	10	Albury	a)
2KP[2]	680	10	Kempsey	a)
2NR[2]	700	50	Grafton	a)
2TR[2]	720	0.2	Taree	a)
2BL[1]	740	50	Sydney	b)
2NB[2]	760	1	Broken Hill	c)
2AN[2]	760	0.05	Armidale	a)
2BA[2]	810	10	Bega	a)
2GL[2]	820	10	Glen Innes	a)
2NC[2]	1230	10	Newcastle	b)
2NA[2]	1510	10	Newcastle	a)
2LG[2]	1570	0.2	Lithgow	a)
2WN[2]	1580	2	Wollongong	a)
2UH[2]	1040	1	Muswellbrook	a)

Call	kc	kW	Location	
Victoria				
3WV[2]	580	50	Horsham	a)
3AR[1]	620	50	Melbourne	a)
3LO[1]	770	50	Melbourne	b)
3GI[2]	830	10	Sale	a)
3WL[2]	1570	0.2	Warnambool	a)
Queensland				
4QL[2]	540	10	Longreach	a)
4QR[1]	590	50	Brisbane	b)
4AT[2]	600	0.5	Atherton	b)
4QN[2]	630	50	Townsville	a)
4QA[2]	720	2	Mackay	a)
4QS	750	10	Toowoomba	a)
4QG[1]	790	10	Brisbane	a)
4RK[2]	840	10	Rockhampton	a)
4QB[2]	910	2	Maryborough	a)
4QY[2]	940	2	Cairns	a)
4MI[2]	1080	0.2	Mount Isa	a)
4GM[2]	1570	0.2	Gympie	a)
4SO[2]	1590	0.2	Southport	a)

Australia

Call	kc	kW	Location	
South Australia				
5CK[2]	640	10	Port Pirie	c)
5CL[1]	730	50	Adelaide	c)
5AN[1]	890	10	Adelaide	d)
5PA[2]	1160	2	Penola	c)
5LN[2]	1530	0.2	Port Lincoln	c)
5WM[2]	1580	0.05	Woomera R. Range	c)
5MG[2]	1580	0.2	Mt. Gambier	c)
5MV[2]	1590	2	Renmark	c)
Western Australia				
6DL	530	10	Dalwalinu	e)
6WA[2]	560	50	Wagin	e)
6NM[2]	600	0.2	Northam	e)
6AL[2]	650	0.4	Albany	e)
6WF[1]	690	50	Perth	f)
6CA	720	0.2	Carnavon	e)
6GF[2]	660	2	Kalgoorlie	e)
Victoria				
6WN[1]	810	10	Perth	e)
6GN[2]	830	2	Geraldton	e)
Tasmania				
7ZL[1]	600	10	Hobart	a)
7QN[2]	630	0.2	Queenstown	a)
7NT[2]	710	10	Launceston	a)
7ZR[1]	940	10	Hobart	b)
Northern Territory				
8DR[2]	650	2	Darwin	c)
8KN[2]	670	0.05	Katherine	c)
8TC[2]	680	0.05	Tennant Creek	c)
8AL[2]	1530	0.05	Alice Springs	c)
Papua/New Guinea				
9PA	1250	2	Port Moresby	b)
9RB	810	2	Rabaul	g)

a) 20.00(Sun 20.30)–14.07; b) 20.00(Sun 20.30)–14.00; c) 20.00(Sun 20.30)–14.37; d) 20.00(Sun 20.30)–14.30; e) 22.00(Sun 22.30)–16.07; f) 22.00(Sun 22.30)–16.00; g) 20.00(Sun 20.30)–03.45, 06.15–12.45.

DOMESTIC SHORT WAVE SERVICE

ADDR: Sydney: A.B.C, Box 487, G.P.O – Melbourne: A.B.C, Box 1686, G.P.O – Brisbane: A.B.C, Box 293 E, G.P.O – Perth: A.B.C, Box 190 D, G.P.O – Port Moresby: A.B.C, Box 76, Port Moresby –

STATIONS: Sydney: VLI (2kW) – Melbourne: VLH (10kW) & VLR (10kW) – Brisbane: VLQ (10kW) & VLM (10kW) – Perth: VLW (10kW) & VLX (50kW) – Port Moresby: VLT (10kW) & VLK (10kW).

Call	kc	m	h of tr.	
VLI6	6090	49.26	W: 20.00–14.07	Sun: 20.30–14.07
VLH11	11880	25.25	W: 20.00–22.45	Sun: 20.30–22.15
VLH15	15230	19.70	W: 23.00–08.15	Sun: 22.30–08.15
VLH9	9680	30.99	W: 08.30–14.07	Sun: 08.30–14.07
VLR6	6150	48.78	W: 20.00–22.15, 08.30–14.00	Sun: 22.30–22.45, 08.30–14.00
VLR9	9680	30.99	W: 22.30–08.30	Sun: 23.00–08.30
VLQ9	9660	31.06	W: 20.00–14.07	Sun: 20.30–14.07
VLM4	4920	60.98	W: 20.00–14.07	Sun: 20.30–14.07
VLW6	6140	48.86	W: 22.00–24.00, 10.30–16.07	Sun: 22.30–24.00, 10.30–16.07
VLW9	9610	31.22	W: 00.15–10.15	Sun: 00.15–10.15
VLX9	9610	31.22	as VLW6	
VLX15	15425	19.45	W: 00.15–10.15	Sun: 00.15–10.15
VLT4	4890	61.35	W: 20.00–22.00, 07.30–14.00	Sun: 20.30–22.00, 07.30–14.00
VLT9	9520	31.51	W: 22.15–07.15	Sun: 22.15–07.15
VLK3	3925	76.43	as VLT4	
VLK4	4890	61.35	W: 22.15–07.15	Sun: 22.15–07.15

VLR relays 3LO, VLH relays 3AR, VLM relays 4QG, VLI takes N.S.W. regional prgr's, VLQ takes Queensland regional prgr's, VLW and VLX takes We. Australian regional prgr's, VLT and VLK relay 9PA.

N: 20.00(not Sun), 20.30(not Sun), 20.45, 21.15(Sun 21.30), 21.45 (Sun 23.00), 00.25(not Sat/Sun), 02.30, 03.30, 06.00(not Sun), 09.00, 11.00(not Sat), 13.00(BBC & Aust), 14.00 – **Wrp:** included in N, also 22.45(Sun), 02.40(Sat), 02.45(Mon–Fri), 03.48(Mon–Fri), 08.28(Sun), 08.55(Sat) – **T.S:** on the h.

NOTE: Although times are in GMT, calendar days apply to the Ea. States of Aust. only

ANN: "This is the A.B.C...." – **INT-SIG:** Three Gongs (C.F.A.) – **V.** by QSL-card and letter. Re. to ABC in capital city of state in which st. is located – **PUB:** "TV Times", R. Australia Prgr. Guide, Schools Broadcasts booklets.

OVERSEAS SERVICE – RADIO AUSTRALIA

ADDR: Radio Australia, P.O. Box 428G, G.P.O, Melbourne. **Cable:** Newscast. **Te:** 67 6911.

TRANSMITTERS: The Tr's of STC, AWA and RCA, manufacture are located at Shepparton – 4 × 100kW, 2 × 50kW and 1 × 10kW, and Lyndhurst – 1 × 10kW, and are capable of operating on any freq. allocated for international broadc. in the 13, 16, 19, 25, 31, 41 and 49 m.b.

NOTE: Radio Australia in common with all international broadc. st's has no assigned freq's, but is allocated certain freq's for use during definite periods.

SERVICES: I: So, So. Ea, So. We. As. II: Ea. As, No. Pacific Isl. III: So. Pacific Isl. IV: Mid-Pacific Isl. V: British Isles, Eu. VI: No. America (Ea). VII: No. America (We). VIII: Af.

TRANSMISSIONS OCTOBER 64–APRIL 65

English:		kc		kc
I:	22.14–23.45	15220	VIII: 04.00–05.15	17820, 15220
	23.45–01.00	17870, 15220	**French**	
	01.00–08.00	21540, 17870	I: 23.15–00.15	17820
	08.00–08.30	17870	IV: 05.15–06.15	15180, 11710
	08.30–09.30	17870, 15220, 11880	VIII: 05.15–06.15	17820, 15220
	09.30–14.30	11880, 9570	**Indonesian**	
	14.30–17.30	9570, 7220	I: 22.45–23.45	17870, 15330, 11760
II:	20.59–23.00	17820, 15240	06.30–08.30	17820, 15220
	20.59–00.15	15240	10.00–11.30	11740, 7220
	08.59–10.00	11810	**Japanese**	
	11.00–12.12	11810, 9580	II: 10.00–11.00	11810, 9580
III:	18.00–21.15	9600	**Mandarin**	
	06.30–09.15	11710, 9570	I: 11.30–13.30	11740, 7220
IV:	18.00–21.15	11840	**Cantonese**	
	00.29–06.45	15240	I: 13.30–14.30	11740, 7220
	06.59–12.12	7190	**Vietnamese**	
V:	08.14–09.15	11710, 9570	I: 12.30–13.30	11790, 9540
VI:	12.14–13.15	9580	**Thai**	
	01.00–03.45	17840, 15220	I: 13.30–14.30	11790, 9540
VII:	01.00–03.45	17840, 15220		

Freq. are subject to alteration. Details of alterations are given in the transmissions concerned for three days before the effective date and in "Transmission Parade" and "DX-ers Calling".

FIXED PROGRAMMES in English:

N: 00.15, 01.30, 02.30, 03.30, 04.00, 04.30, 05.00, 06.00, 07.00, 08.45 (25/10–27/3), 09.00, 10.00 (Dictation), 11.00, 12.00, 13.00, 14.00, 15.00, 16.00, 17.00, 18.00, 19.00, 20.00, 21.00, 21.45, 22.45, 23.30 – **Mailbags:** Pacific/Asia/Africa Edition: Sat 18.30, 21.15, Sun 01.00, 04.10, 05.30, 11.30, 16.45; British Isles/European Edition: Sun 06.45 (08.30 25/10–21/3), No. America Edition: Sun 12.30, Mon 01.10, 03.00. **DX Programme:** Sat 19.00(III, IV), 22.00(II), Sun 05.00(VIII), 09.00(V) (May–October 07.15), 13.00(VI), 15.30(I+V), Mon 02.15(VI+VII) – **Request Prgr: Listener's Choice:** Sun 11.10, D 14.30. **Music by Request:** Sun 00.30, W 00.40. **Sport:** Results W 08.30. Descriptions and results of major sports events in Australia Sat 02.29–07.30 on 21540kc to I. **Stock Exchange:** Fri 08.45, 13.00, 14.20, Sat 02.00. **National Music:** Music by Australian artists and composers is broadc. regularly in all Tr's – **Programme Previews:** A preview is given at the start of each daily tr. and three min. before the close of tr. to the resp. areas – **Transmission Parade:** Fri 20.40, 22.10, Sat 05.45, 14.25.

FIXED PROGRAMMES in other languages:

FRENCH: N: 23.30, 05.30 – **N, Commentary:** Tues–Sat 23.42, 05.42. **Mailbag:** Sun 00.00, 05.45.

INDONESIAN: N: *23.15, 06.45, 08.00, 10.10, 11.00* – **Mailbag:** Sun 07.15, 10.30. **"English Lessons for Indonesians":** Tues, Thurs 07.00, 10.30.

JAPANESE: N: 10.30. **Mailbag:** Sun 10.10 – **DX-Session:** Sun 10.45 – **Commentary:** Mon–Fri 10.42.

MANDARIN: N: 11.45, 13.15. **N, Commentary:** Mon–Fri 11.57. **Mailbag:** Sun 12.30.

CANTONESE: N: 14.00 – **Commentary:** Mon–Fri 14.12 – **Storyteller:** Sat 13.40.

THAI: N: 14.00. **Commentary:** Mon–Fri 14.15 – **Mailbag:** Sun 13.45.

VIETNAMESE: N: 13.00. **Commentary:** Mon–Fri 13.15 – **Mailbag:** Sun 12.40.

ANN: "This is Radio Australia transmitting the Overseas Service from the Melbourne studios of the A.B.C." – "You are tuned to Radio Australia, the Overseas Service of the A.B.C." Freq's are given at frequent intervals.

TUNING AND INT-SIG: Musical Box playing "Waltzing Matilda" for five min. preceding prgr's to all areas: Prgr's commence with chimes of Elizabeth Street Post Office Clock and the laugh of the Australian bird, the Kookaburra.

V: Listeners reports are welcomed and correct reports are confirmed by verification card.

PUB: A prgr. booklet is available free upon application. Issued twice yearly covering April–Oct. and Nov.–March.

Your voice is heard all over the world . . .
when you place your sales messages in the WRTH. . . because the reader of the WRTH holds your markets in the palm of his hand . . . For estimation of readership write for full particulars to
World Radio TV Handbook Co. Ltd.
Sundvej 6, Hellerup, Denmark.

PRIVATELY OWNED COMMERCIAL BROADCASTING STATIONS

Associated in a body called: **Federation of Australian Commercial Broadcasters. addr:** 47, York Street, Sydney – **Te:** 29-1738. **Cable:** AFOBS – **L.P:** Ag. Federal Dir: H.M. Goodsall. Also Promotion and Research Organization "Australian Radio Advertising Bureau", 47 York Str, Sydney – **Te:** 29-2623.

The Australian Broadcasting Control Board is a Go. Authority responsible for the planning of the broadc. sce's ensuring that technical equipment and prgr. sce's are of adequate standards and determining power, frequency and periods of operating of st's. **Addr:** 373 Elizabeth Str, Melbourne, C.1. **Cable:** Conboard. **Te:** 30-4321 – **L.P:** Chmn: R.G. Osborne. Secr: J.A. McNamara. Dir. Tec: D. McDonald. Dir. Prgr: D.A. Jose.

2CH is controlled by the New South Wales Council of Churches, **2SM** by the Roman Catholic Church, **5KA** and **5AU** by the Methodist church.

Abbreviations: Amalg=Amalgamated, Ass=Associated, Me=Melbourne, B. Casters=Broadcasters, Transc=Transcontinental.

Note: Times quoted are GMT, but refer to local calender days. Times given are Mon-Fri. Sat & Sun times not indicated.

NEW SOUTH WALES: Call letter: 2—.

	Call	kc	kW	Tr. times
1)	BH	660	0.2	20.00–13.00
2)	KA	780	2	19.00–12.30
3)	GB	870	5	24 h
4)	LM	900	2/1	20.00–12.30
5)	XL	920	2/1	20.00–13.00
6)	UE	950	5	24 h
7)	KM	980	2	19.30–13.30
8)	GZ	990	2	20.00–13.30
9)	KY	1020	5	24 h
10)	CA	1050	2	19.30–14.00
11)	RG	1070	2/1	20.00–13.00
12)	MO	1080	2/1	20.00 -13.05
13)	UW	1110	5	24 h
14)	AD	1130	2	20.00–13.30
15)	HD	1140	2	24 h
16)	WG	1150	2	19.30–13.30
17)	CH	1170	5	19.30–14.00
18)	NZ	1190	2	19.30–13.00
19)	GF	1210	2	19.30–14.00
20)	DU	1250	2	19.30–14.00
21)	SM	1270	5	24 h
22)	TM	1290	2	20.00–13.00
23)	LF	1340	2	20.00–13.05
24)	NX	1360	2	19.30–13.00
25)	LT	1370	0.5	19.30–12.30
26)	GN	1380	2	20.00–13.00
27)	PK	1400	2	20.00–13.00
28)	KO	1410	2	24 h
29)	WL	1430	2	19.00–14.00
30)	MW	1440	2	20.00–13.00
31)	MG	1450	2	20.00–13.15
24)	NM	1460	0.5	19.30–13.00
33)	BE	1480	1	20.30–12.00
34)	AY	1490	2	20.00–13.30
35)	BS	1500	2	20.00–13.30
36)	QN	1520	2	20.30–12.30
37)	VM	1530	2/0.5	19.30–14.00
38)	RE	1560	2/0.5	19.30–12.30

VICTORIA: Call letter: 3—.

39)	UL	880	2/1	19.00–13.30
40)	UZ	930	5	24 h
41)	BO	960	2	19.30–14.00
42)	HA	1000	2	19.00–13.30
43)	DB	1030	5	24 h
43)	LK	1090	2	2
43)	LK	1090	2	19.30–13.30
44)	CS	1130	2	20.00–12.30
45)	KZ	1180	5	19.30–13.30
46)	YB	1210	2	19.30–13.30
47)	TR	1240	2	19.00–14.00
48)	SR	1260	2	19.00–14.00
49)	AW	1280	5	18.30–15.00
50)	BA	1320	2	19.30–14.00
51)	SH	1330	2	20.00–13.05
52)	GL	1350	2	19.30–13.00
53)	XY	1420	5	24 h
54)	CV	1440	2	19.00–13.00
55)	MA	1470	2	20.00–12.30
56)	AK	1500	5	20.00–09.00(Su) 21.00–07.00(Wi)
57)	NE	1600	2/1	19.00–14.00

QUEENSLAND: Call letter: 4—.

58)	KQ	690	2	24 h
59)	TO	780	2	19.30–13.30
60)	GR	860	2	19.30–13.00
61)	WK	880	2/1	20.00–12.30
62)	VL	920	2/1	20.00–12.30
63)	AY	960	2	19.30–13.30
64)	RO	1000	2	19.30–13.00
65)	CA	1010	2	20.00–13.00
66)	IP	1010	2	19.30–12.30
67)	SB	1060	2	20.00–12.30
68)	LG	1100	2	20.00–04.30 07.00–12.00
69)	BC	1120	2	24 h
70)	MB	1160	2	19.30–13.00
71)	AK	1220	2	19.00–13.00
71)	BK	1300	2	19.00–13.00
72)	NA	1320	2	19.30–12.00
73)	BU	1330	2	19.30–12.30
74)	GY	1350	2/1	19.30–12.15
75)	LM	1370	0.5	20.00–13.00
76)	MK	1380	2	19.30–12.30
77)	BH	1390	2	19.00–14.00
78)	ZR	1480	2/1	20.00–12.30

SOUTH AUSTRALIA: Call letter: 5—.

79)	RM	800	2	19.30–13.00
80)	DN	970	2	24 h
81)	PI	1040	2	19.30–13.15
82)	KA	1200	2	24 h
81)	AD	1310	2	24 h
81)	SE	1370	0.5	19.30–13.15
83)	AU	1450	2	19.30–13.00
81)	MU	1460	0.5	19.30–13.15

WESTERN AUSTRALIA: Call letter: 6—.

84)	VA	780	2	22.00–14.30
85)	AM	860	2	22.30–14.30
86)	PR	880	2	21.00–17.00
87)	BY	900	2	22.00–14.30
88)	NA	920	2	22.00–17.00
89)	TZ	960	2	21.00–15.00
90)	KG	980	2	22.00–06.00 08.30–14.30
91)	PM	1000	2	22.00–15.00
91)	GE	1010	2	21.55–06.00 09.00–14.30
87)	WB	1070	2	22.00–14.30
87)	IX	1080	2	22.00–16.00
87)	MD	1100	2	22.00–14.30
86)	CI	1130	2	21.00–15.00
92)	KY	1210	2	24 h

TASMANIA: Call letter: 7—.

	Call	kc	kW	Tr.times
93)	SD	540	2	21.00–12.15
94)	BU	560	0.5	20.00–12.30
95)	QT	720	0.5	21.00–03.00 06.00–12.30
96)	HO	860	2	19.00–14.00
97)	AD	900	0.5	20.30–13.00
98)	EX	1010	2	19.00–14.00
99)	HT	1080	2	19.30–14.00
100)	LA	1100	2	19.30–14.00

NORTHERN TERRITORY: Call letter: 8—.

101) DN 1240 2 20.00–13.30

1) **Broadc. St. 2BH,** P.O. Box 432, Broken Hill. **L.P:** St. Mgr: J.W. Prider. **Ann:** "R. Silver City". V. by QSL-card.

2) **Transcontinental Broadc. Corp. Ltd,** Rural Bank Bldg, Katoomba St, Katoomba. **L.P:** St. Mgr: A.J. Gibson. **Ann:** "Voice of the Mountains". V. by letter. Rp.

3) **Broadc. St. 2GB Pty Ltd,** 136 Philip St, Sydney. **L.P:** St. Mgr: D.L. Foster. V. by card and/or letter. Rp.

4) **Richmond River B. Casters Pty Ltd,** Bruxner Highway, Goonellabah, Lismore. **L.P:** Mgr: P. Le Brun.

5) **Cooma B. Casters Pty Ltd,** P.O. Box 58, Cooma. **L.P:** Man. Dir: J.S. Scott. **Ann:** "The Voice of South Eastern Australia". V. by QSL-card – 6) **R. 2UE Sydney Pty Ltd,** 29 Bligh St, Sydney. **L.P:** Gen. Mgr: A.D. Faulkner – 7) **R. Kempsey Ltd,** P.O. Box 136, West Kempsey. **L.P:** St. Mgr: L.B. Harte. V. by QSL-card. Rp.

8) **Country Broadc. Sce. Ltd,** P.O. Box 465, Orange. **L.P:** Gen. Mgr: A. Ridley. **N:** on the h. **Ann:** "2GZ Central New South Wales". V. by letter.

9) **Labour Council of New South Wales,** Broadc. St. 2KY, 32 Orwell St, Pott's Point, Sydney. **L.P:** Gen.Mgr: L.R. Hood.

10) **Canberra B. Casters Pty Ltd,** 64 Northbourne Ave, Canberra City. **L.P:** St. Mgr: P.R. Carrodus. V. by QSL-card.

11) **2RG B. Casters Pty Ltd,** Ulong St, Griffith. **L.P:** St. Mgr: R. Gamble. V. by letter.

12) **2MO Gunnedah Pty Ltd,** P.O. Box 62, Gunnedah. **L.P:** St. Mgr: L. Worms. **N:** Every h on the h at 20.00–12.00, 21.30, 02.30, 08.30. V. by letter. Prgr. schedule free.

13) **Commonwealth Broadc. Corp. Pty Ltd,** 365 Kent St, Sydney. **L.P:** Gen. Mgr: L.C. Hynes. **N:** Every h on the h. V. by letter.

14) **New England B. Casters Pty Ltd,** Broadcast House, Rusden St, Armidale. **L.P:** Mgr: R.V. Brislan.

15) **Airsales Broadc. Pty Ltd,** P.O. Box 19, Mayfield. **L.P:** St. Mgr: O.J. Story. V. by QSL-card. **Ann:** "First in Newcastle".

16) **Riverina B. Casters (Holdings) Pty Ltd,** 16 Fitzmaurice St, Wagga Wagga. **L.P:** St. Mgr: J. McCormick. **N:** 20.00, 20.30, 21.00, 21.30, 22.00, 22.30, 23.00, 24.00, 01.00, 02.30, 03.00, 03.30, 04.00, 05.00, 06.00, 07.00, 08.00, 08.45, 11.00, 12.00, 13.00. V. by letter.

17) **Broadc. St. 2CH** (Owner: NSW World Council of Churches). Operated by Amalgamated Wireless Ltd. **Addr:** 47 York St, Sydney. **L.P:** St. Mgr: H.R. Huntley. **N:** Every half h to 23.00, hourly to 09.00, 12.00. V. by QSL-card.

18) **Northern B. Casters Pty Ltd,** Otho Street, Inverell. **L.P:** Gen. Mgr: A. Ridley – 19) **Grafton Broadc. Co. Ltd,** 124 Prince St, Grafton. **L.P:** Mgr: K. Armour. **Ann:** "Voice of the Pacific Beautyzone". V. by letter – 20) **Western B. Casters Pty Ltd,** P.O. Box 44, Dubbo. **L.P:** St. Mgr: F.S. Ferguson. V. by QSL-card.

21) **Broadc. St. 2SM Pty Ltd,** 257 Clarence St, Sydney. **L.P:** Gen. Mgr: W.H. Stephenson. V. by QSL-card.

22) **Tamworth R. Development Co. Pty Ltd,** P.O. Box 21, So. Tamworth, NSW. **L.P:** Man. Dir: E. Higginbotham. V. by QSL-card.

23) **Young B. Casters Pty Ltd,** 24 Lovell St, Young. **Cable:** Twolf. **L.P:** St. Mgr: J.H. Finlayson. **N:** 20.00, 20.30, 21.00, 21.30, 22.00, 24.00, 01.00, 02.00, 02.30, 03.15, 04.00, 05.00, 06.00, 07.00, 08.00, 08.30, 10.00, 11.00, 12.00, 13.00. **Ann:** "This is 2LF the friendly st." V. by QSL-card.

24) **Hunter B. Casters Pty Ltd,** 56 Hunter St, Newcastle. **Cable:** Twonx. **L.P:** Gen. Mgr: K.C. Robinson. **N:** hourly. V. by QSL-card. Rp.

25) **Lithgow B. Casters Pty Ltd,** Great Western Highway, Lithgow. **L.P:** St. Mgr: F. Harper. **N:** Every half h. V. by QSL-card.

26) **Goulburn Broadc. Co. Pty Ltd,** P.O. Box 115, Goulburn. **Cable:** Twogn. **L.P:** St. Mgr: D.J. O'Reilly. V. by letter. Rp.

27) **Parkes Broadc. Co. Pty Ltd,** 307 Clarinda St, Parkes. **L.P:** Mgr: N.T.W. Spicer – 28) **Radio 2KO Newcastle Pty Ltd,** 110 Hunter St, Newcastle. **Cable:** Twoko. **L.P:** Gen. Mgr: C.J. Derwin. **N:** On the h and half h. V. by letter.

29) **Wollongong Broadc. Pty Ltd,** P.O. Box 34, Wollongong. **Cable:** Twowl. **L.P:** Gen. Mgr: R. Jackson. **N:** W. 19.30, 19.54*, 20.30, 20.54*, 21.30, 22.15*, 00.00 (Sat), 01.00, 02.00 (Sat), 02.30, 03.15*, 04.30*, 05.00*, 06.00*, 08.00*, 08.25*, 08.45, 11.30*, 12.00*, 13.00, 13.50, (*)=not Sat). Sun: 21.30, 22.30, 02.30, 08.45, 11.30. V. by letter. R. preferred. Re. from listeners in NSW will not be verified. **Pub:** Prgr. schedule free.

30) **Tweed R & Broadc. Co. Pty Ltd,** P.O. Box 53, Murwillumbah. **L.P:** St. Mgr: W.G. Diamond. V. by QSL-card. Rp.

31) **Mudgee Broadc. Co. Pty Ltd,** Wellington Rd, Mudgee. **L.P:** Man. Dir: R.B. Camplin. **N:** Every h. **V.** by QSL-card or letter. **Rp.** Records accepted.
32) **Hunter B. Casters Pty Ltd,** Bridge St, Muswellbrook. **L.P:** Mgr: K.C. Robinson – 33) **R. 2BE Pty Ltd,** P.O. Box 77, Bega. **L.P:** Gen. Mge: J.A. Kerr. **V.** by letter. Rp – 34) **Amalgamated Wireless (A'sia) Ltd,** A.M.P. Building, Dean St, Albury. **L.P:** St. Mgr: E.J. Pattison – 35) **Bathurst B. Casters Pty Ltd,** 109 George St, Bathurst. **Cable:** Twobs. **L.P:** Gen. Mgr: E.N. Williams. **Ann:** "2BS Centre of the West". **V.** by QSL-card.
36) **Haig-Muir Broadc. Pty Ltd,** 368 George St, Deniliquin. **L.P:** St. Mgr: P.N. Charley. **N:** 21.00 (W), 21.30 (W), 22.00 (W), 22.30, 02.30, 03.30 (W), 06.00 (W), 08.30, 09.15. **Ann:** "2QN The Happy Station". **V.** by QSL-card.
37) **Moree Broadc. & Development Co. Ltd,** 93 Balo St, Moree. **L.P:** St. Mgr: R.E. Morrisby. **V.** by letter. Rp.
38) **Manning Valley Broadc. Pty Ltd,** P.O. Box 185, Taree. **L.P:** St. Mgr: A.W. Thompson. **V.** by card and letter.

39) **Associated Broadc. Sce's Ltd,** 43 Victoria St, Warragul. **L.P:** St. Mgr: C. Cameron. **N:** 20.00, 20.30, 21.00, 21.45, 22.30, 23.00, 00.00, 01.00, 02.00, 02.30, 03.30, 04.00, 05.00, 06.00, 07.00, 08.00, 11.00, 12.00, 13.00. **DX-Prgr:** "World at your fingertips" Sat. 00.30. **V.** by QSL-card to Box 84, Warragul. **F.Pl:** Move to 530kc.
40) **Nilsen's Broadc. Sce. Pty Ltd,** 45 Bourke St, Melbourne. **L.P:** St. Mgr: L. Bennett. **Ann:** "The Greater 3UZ". Also used singing ann "Nice to come home to, 3UZ". **V.** by QSL- card.
41) **Amalgamated Wireless (A'sia),** Pall Mall, Bendigo. **Cable:** Threebo. **L.P:** St. Mgr: A.P. Scown. **N:** 19.30, 20.00, 20.30, 20.45, 21.30, 21.45, 22.30, 23.30, 00.30, 01.30, 02.30, 03.30, 04.30, 05.30, 06.30, 07.30, 08.00, 08.50, 12.00, 13.30. **V.** by letter. Rp.
42) **Western Province Radio Pty Ltd,** 37 Gray St, Hamilton. **L.P:** St. Mgr: K. Barnes.
43) **Herald Sun Stations,** 36 Flinders St, Melbourne Cl. **Owner:** Herald & Weekly Times Ltd. **Cable:** Threedb. **L.P:** Mgr: C. Crawford. **N:** Every h on the h. **Ann:** "3DB Melbourne, 3LK Ce. Victoria, the Herald-Sun Stations". **V.** by QSL-card or letter. Records accepted.
44) **Colac Broadc. Co. Pty Ltd,** 241 Murray St, Colac. **L.P:** St. Mgr: C.S. Faulkner. **N:** Tues-Sat: 21.45, 22.05, 22.30, 02.30, 03.15*, 08.30, 11.00*, (*=not Sat). Sun: 22.45, 02.30, 08.30, 11.00. Mon: 21.45, 02.30, 03.15, 08.30, 11.00. **V.** by QSL-card. Rp.
45) **3KZ Broadc. Co. Pty Ltd,** 64 Elizabeth St, Melbourne. **Cable:** Threekz. **L.P:** St. Mgr: N.E. Balmer. **N:** W: 20.30, 21.30, 02.30, 09.00, 12.00, 13.00 (not Sat). Sun: 22.45, 02.30, 09.00. **Ann:** "The Brighter Broadc. Sce, 3KZ Melbourne". **V.** by QSL-card.
46) **Associated Broadc. Sce. Ltd,** P.O. Box 255, Warrnambool. **L.P:** St. Mgr: Eric Collings. **V.** by letter.
47) **Latrobe Valley & Gippsland B. Casters Pty Ltd,** Stawell St, Sale. **L.P:** St. Mgr: E.W. Evans – 48) **Associated Broadc. Sce. Ltd,** Box 205, Shepparton. **L.P:** St. Mgr: E.M. Clyne. **V.** by letter.
49) **3AW Broadc. Co. Pty Ltd,** 382 Latrobe St, Melbourne. **Cable:** Threeaw. **L.P:** St. Mgr: R.B. Quinn. **N:** Every half h until 23.00, 00.00, 02.30, 08.30, 10.30, 13.00. **Ann:** "This is R. Melbourne, 3AW". **V.** by QSL-card or letter.
50) **Ballarat B. Casters Pty Ltd,** Box 360, Ballarat. **L.P:** St. Mgr: E.J.W. Whykes. **V.** by QSL-card. Rp.
51) **Central Murray B. Casters Pty Ltd,** 77 McCallum St, Swan Hill. **L.P:** St. Mgr: H. Lithgow. **V.** by QSL-card. Rp.
52) **Geelong B. Casters Pty Ltd,** 191 Ryrie St, Geelong. **Cable:** Threegl. **L.P:** Gen. Mgr: J.M. Morwood. **N:** 19.35, 20.00, 21.45, 23.00, 00.00, 01.00, 02.00, 02.30, every h on the h from 04.00 to 12.00, 12.45. **V.** by QSL-card. Rp.
53) **Efftee B. Casters Pty Ltd,** 222 Faraday St, Carlton N3, Melbourne. **Cable:** Threexy. **L.P:** Gen. Mgr: R.J. Baeck. **N:** Every h on the h. **V.** by QSL-card. Rp.
54) **Central Victorian B. Casters Pty Ltd,** P.O. Box 79, Maryborough. **L.P:** St. Mgr: Ken J. Parker. **V.** by letter. Rp.
55) **Sunraysia B. Casters Pty Ltd,** P.O. Box 539, Mildura. **L.P:** St. Mgr: M. Folie. **V.** by letter.
56) **Melbourne B. Casters Pty Ltd,** Television City, 22 Bendigo St, Richmond. **L.P:** St. Mgr: N. Dick. **D. Prgr:** 16/4–15/8: 21.00–07.00 16/8–15/10: 21.00–08.00; 16/10–15/2: 20.00–09.00; 16/2–15/4: 20.00–08.00. **N:** Every h and half h. **Ann:** "3AK, The Voice of Television City". **V.** by QSL-card.
57) **Wangaratta Broadc. Co. Pty Ltd,** P.O. Box 167, Wangaratta. **Cable:** Threene. **L.P:** Man. Dir: D.C. De La Rue. **Ann:** "The Voice of North East Victoria". **V.** by card and letter. Rp.

58) **Labor Broadc. St. Pty Ltd,** Box 398F, GPO, Brisbane. **Cable:** Fourq. **L.P:** Gen. Mgr: L.W. Beioley. **N:** 21.45, 22.45, 00.25, 02.30, 03.30, 06.00, 07.00, 12.00, 13.10, 14.00. **V.** by letter.
59) **Amalgamated Wireless (A'sia) Ltd,** Stanley Str, Townsville. **Cable:** Fourto. **L.P:** St. Mgr: K. Duncan.
60) **Gold Radio Sce. Pty Ltd,** 453 Ruthven Str, Toowoomba. **L.P:** St. Mgr: R. Stevenson. **V.** by letter. Rp.
61) **Warwick Broadc. Co. Pty Ltd,** Palmerin Str, Warwick. **Ca ble** Fourwk. **L.P:** St. Mgr: W.O. Kinane. **V.** by letter. Rp.
62) **Charleville Broadc. Co. Pty Ltd,** P.O. Box 84, Charleville. **L.P:** St. Mgr: W.D. Everson. **Ann:** "The Voice of the Far West". **V.** by QSL-card.
63) **Ayr. B. Casters Pty Ltd,** P.O. Box 880, Townsville. **Cable:** Fouray. **L.P:** St. Mgr: G. T. Schmid. **V.** by letter. Rp.
64) **Rockhampton Broadc. Co. Pty Ltd,** Rheuben House, East Str, Rockhampton. **Cable:** Fourro. **L.P:** St. Mgr: E.J. Rheuben. **V.** by letter – 65) **Amalgamated Wireless (A'sia) Ltd,** Shields, St, Cairns. **L.P:** St. Mgr: J.M. Dower.
66) **So. Queensland Broadc. Corp. Pty Ltd,** P.O. Box 165, Ipswich. **Cable:** Fourip. **L.P:** St. Mgr: K. Fairweather. Prepared card and reply postage required for **V.** of re.
67) **So. Burnett Broadc. Co. Ltd,** Alford St, Kingaroy. **Cable:** Foursb. **L.P:** St. Mgr: G.H. Parker. Prepared card and reply postage required for **V.** of re.
68) **Central Queensland Broadc. Corp. Pty Ltd,** Box 20, Longreach. **Cable:** Fourlg. **L.P:** St. Mgr: A. Brandt. **N:** 20.20, 20.45, 21.45, 02.30, 03.30, 09.00, 11.00. **Ann:** "This is R. 4LG Longreach, key station of the Central Queensland Broadc. Network". **V.** by letter.
69) **Commonwealth Broadc. Corp (Qld) Ltd,** Cnr Wharf and Adelaide St, Brisbane. **L.P:** St. Mgr: M.E. Baker. **Ann:** "4BC, The R. Voice of Queensland – 4BC is never off the air". **V.** by letter.
70) **Maryborough Broadc. Co. Pty Ltd,** 363 Kent St, Maryborough. **Cable:** Fourmb. **L.P:** St. Mgr: A.P. Wynne. **V.** by card and letter. Rp.
71) **Queensland Newspapers Pty Ltd,** 93 Queen St, Brisbane. **Cable:** Fourbk. **L.P:** Mgr: R. Goss – 72) **Maroochy Broadc. Co. Ltd,** 161 Currie St, Nambour. **L.P:** St. Mgr: R.J. Taylor – 73) **Bundaberg B. Casters Pty Ltd,** 55 Woongarra St, Bundaberg. **L.P:** St. Mgr: G. Mc. Cormack. **V.** by QSL-card.
74) **Gympie Broadc. Co. Ltd,** 98 Mary St, Gympie. **L.P:** St. Mgr: A. H. Buzacott. **V.** by letter. Rp.
75) **No. Queensland Broadc. Corp. Pty Ltd,** P.O. Box 432 ,Mount Isa. **L.P:** St. Mgr: G.D. Atthow. **N:** W: 20.10, 20.45, 21.45, 02.30, 03.30*, 06.00*, 09.00, 11.00. Sun: 23.00, 02.30, 09.00, 11.00. **V.** by letter. Rp –
76) **Mackay Broadc. Sce Pty Ltd,** 38 Gordon St, Mackay. **Cable:** Fourmk. **L.P:** Gen. Mgr: M.E. Low. **Ann:** "The Voice of the Barrier Reef". **V.** by QSL-card.
77) **B. Casters (Aust) Pty Ltd,** 43, Adelaide St, Brisbane. **Cable:** Fourbh. **L.P:** Mgr: N. Llewelyn. **V.** by QSL-card. Rp.
78) **Maranoa Broadc. Co. Ltd,** P.O. Box 22, Roma, Queensland. **L.P:** St. Mgr: C.R. Taylor.

79) **River Murray B. Casters Ltd,** P.O. Box 118, Berri. **L.P:** Gen. Mgr: K.R. Parham. **N:** Mon–Fri: Every h on the half h. Sat: 20.30, 21.30, 22.30, 23.30, 00.30, 02.30, 09.30. Sun: 22.30, 02.30, 09.15, 12.30. **V.** by QSL-card.
80) **Hume B. Casters Ltd,** 201–205 Tynte St, No. Adelaide. **L.P:** St. Mgr: J.S. Larkin. **N:** Every h on the half h.
81) **Advertiser Broadc. Network,** G.P.O. Box 392, Adelaide. **Cable:** Fivead. **L.P:** Mgr: J.M. Fowler. **N:** 22.00, 02.30, 09.30, 12.30; 5AD = Adelaide, 5PI = Central, 5MU = Eastern, 5SE = So.We. So. Australia. **V.** Re. not wanted but those received are answered by QSL-cards.
82) **5KA B. Casters Pty Ltd,** 43 Franklin St, Adelaide. **Cable:** Fiveka. **L.P:** Gen. Mgr: K.R. Parham. **V.** by QSL-card. Rp.
83) **5AU B. Casters Pty Ltd,** P.O. Box 247, Port Augusta. **L.P:** St. Mgr: N.W. Bradley. **N:** 21.45, 08.15, 09.15, 12.30. **V.** by QSL-card. Rp.

84) **Albany B. Casters Ltd,** 167 York St, Albany. **Cable:** Sixva. **L.P:** St. Mgr: T. Furlong. **V.** by letter – 85) **Whitfords Broadc. Network,** 115 St. George's Terrace, Perth. **L.P:** Gen. Mgr: D.E. Muir – 86) **Nicholson's Broadc. Sce,** 340 Hay St. East, Perth. **L.P:** Gen. Mgr: G.C. Lewis. **D.Prgr: N:** on the h. 6TZ (Bunbury) relaying 6CI (Collie). **V.** by letter. Rp. Records accepted.
87) **W.A. B.Casters Pty Ltd,** R. House, 38 Mounts Bay Rd, Perth. **L.P:** St. Mgr: J.T. Hunn.
88) **Westland Broadc. Co. Ltd,** Narrogin, We. Australia. **L.P:** Gen. Mgr: R.J. Mercer. Rel. 6KY Perth. **V.** by QSL-card. Rp.
89) **Broadc. St. 6TZ,** Princep St, Bunbury. **L.P:** St. Mgr: P. Nash. Prepared card and rp. required for **V.**
90) **Whitfords Broadc. Network,** 151 Hannan St, Kalgoorlie. **L.P:** St. Mgr: G.C. Chapman. **V.** by letter.
91) **Whitfords Broadc. Network,** Elanor St, Geraldton. **Cable:** Whitnet. **L.P:** St. Mgr: L.J. Harris. **V.** by card and/or letter. Rp.
92) **Westland Broadc. Co. Ltd,** 17 James St, Perth. **Cable:** Sixky. **L.P:** Gen. Mgr: J.W. Hugall. **V.** by QSL-card. Rp.

93) **N. E. Tasmanian R. B. Casters Pty Ltd,** P.O. Box 109, Scottsdale **Cable:** Sevensd. **L.P:** St. Mgr: B. Scetrine. **V.** by QSL-card.
94) **Burnie Broadc. Sce Pty Ltd,** P.O. Box 120, Burnie. **Cable:** Sevenbu. **L.P:** Gen. Mgr: T. Lord – 95) **We. Coast B. Casters Pty Ltd,** P.O. Box 315, Queenstown. **L.P:** Mgr: H. Ebrall.
96) **Comm. B. Casters Pty Ltd,** G.P.O. Box 542F, Hobart. **Cable:** Sevenho. **L.P:** Mgr: A. Brown. **N:** Every half h 19.30–23.00, on the h at 00.00–14.00, also at 02.30, 08.30. **Ann:** "R. Hobart, 7HO, the big :sound in radio". **V.** by QSL-card. Rp.
97) **N. Tasmanian B. Casters Pty Ltd,** P.O. Box 18, Devonport. **Cable:** Sevenad. **L.P:** Mgr: M. Evans.

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98) **7EX Pty Ltd**, Watchorn St, Launceston. **Cable:** Sevenex. **L.P:** Mgr: A.E. McClelland. **Ann:** "7EX, the Examiner Station".
99) **Metropolitan B. Casters Pty Ltd**, G.P.O. Box 572F, Hobart. **Cable:** Sevenht. **L.P:** St. Mgr: J. Howell. **N:** W: 20.00, 20.55, 21.45, 02.30, 09.00, 12.00*, 13.50*, (*=not Sat); Sun: 23.00, 02.30, 09.00, 12.00, 13.45. **Ann:** "Radio 7HT Hobart, Tasmania's top family st.". **V.** by letter. Rp.
100) **Findlay & Wills B. Casters Pty Ltd**, B. cast House, The Quadrant, Launceston. **Cable:** Sevilia. **L.P:** Gen. Mgr: R.E. Ward. **N:** every half h at 19.45–21.45, 22.30, 00.30, 02.30, 03.30, 05.30, 07.30, 08.45, 11.00, 12.00, 13.00. **V.** by QSL-card. Rp.

101) **Darwin B. Casters Pty Ltd**, 16 Smith St. West, Darwin. **L.P:** St. Mgr: D.H. Charlton. **V.** by letter. Rp.

COOK ISLANDS (N.Z. Territory)

L.T: GMT−10½ h – **Pr.L:** English, Maori.

RADIO RAROTONGA (Go.)

ADDR: Rarotonga. **Te:** 24 – **L.P:** Officer in charge: P.F. Henderson. Dir. Tec: S. Kingan.
STATIONS: mw: 0.15kW, sw=0.25kW.

Call	kc	m	Call	kc	m	Call	kc	m
ZKIZA	820	365.9	ZK5	5045	59.46	ZK4	11760	25.51
ZK6	3265	91.87	ZK3	9695	30.94			

HOME SCE. in English, Maori: Mon, Tues, Thurs, Fri 22.45–23.15 on 820/9695kc. Tues 04.30–07.40. Thurs 04.30–08.15, Sat 04.30–07.50 on 820/5045kc – **N: English:** 22.45, 04.32, 07.30 (rel. R. New Zealand) 07.40 (Tues), 08.15 (Thurs), 07.50 (Sat). **Maori:** 22.55, 05.30.
ANN: "This is ZKIZA R. Rarotonga" – **INT-SIG:** Cook Islands Drum Beats – **V.** by QSL-card. Rp.

FIJI (British)

L.T: GMT+12 h – **Pr.L:** English, Fijian, Hindustani.

FIJI BROADCASTING COMMISSION

(Independent Statutory Body, 50% comm. 50% cultural)
FI: By license payments and adv – **Fee:** £ 1–5–0.
ADDR: P.O. Box 334, Suva. **Cable:** Broadcom. **Te:** 2621 – **L.P:** Chmn: J. M. Hedstrom, LLB. Mgr: J. S. W. Stannage. Dir. Prgr: G. H. King. Dir. Tec: T. C. Agar.
STATIONS (System: AWA): *) Sat. 11.00.

Call	kc	m	kW	L	h of tr.
VRH	710	422	5	Vernaculars	18.00–21.00, 04.00–10.30*
VRH2	930	323	3	English	18.00–10.30(Sat 11.00)
VRH3	890	337	2.5	English/Hindi	18.00–10.30(Sat 11.00)
VRH11	1320	227	1		18.00–10.30(Sat 11.00)
VRH8	3230	93.0	10	English	18.00–23.30, 04.00–10.30*
VRH9	3284	91.35	10	Vernaculars	18.00–21.00, 04.00–10.30*
VRH4	4756	63.08	10	English	23.30–03.45
VRH5	4785	62.70	10	Vernaculars	21.00–04.00

HOME SCE. in English, Fijian, Hindi: W 18.00–10.30(Sat 11.00), Sun 19.00–10.30. **English: N:** 18.15, 19.00(BBC), 19.45, 20.00(BBC), 01.00 (R. New Zealand), 01.30 (R. Australia), 07.00, 09.00 (ABC) – **Local N. in Fijian:** W: 18.15, 19.45, 01.15, 07.10 – **Wrp:** 19.00, 20.00, 01.30, 07.00 – **ANN:** E: "This is the Fiji Broadc. Commission". Fijian: "Oqo na Fiji Broadc. Commission". Hindi: "Yeh Fiji Broadc. Commission Hai" – **INT-SIG:** Beat of Fijian Lali (Log Drum).

GILBERT and ELLICE ISLANDS (British Colony)

L.T: GMT+12 h – **Pr.L:** English, Gilbertese, Ellice.

GILBERT AND ELLICE ISLANDS BROADCASTING SERVICE (Go.)

ADDR: Broadc. Officer, Betio, Tarawa. **Cable:** "Broadcasts".
L.P: Dir: R. K. Uatioa. Dir. Tec: C. W. Adams.
STATIONS: VTW 844kc 355m 0.05kW – VTW2 6055kc 49.55m 2kW
HOME SCE: Gilbertese and Ellice: D. exc. Thurs, Sat: 04.30–06.00 (Vernacular), Thurs 07.30–10.30 (English) – **N: Gilbertese, Ellice:** Wed, Fri 05.30, Sun 04.00. **English:** Thurs 07.45. **Wrp:** with English N – **ANN:** E: "Good evening (afternoon) listeners, this is the Voice of Tarawa". Gilbertese: "Kam na bane ni mauri ara taan kakauongo n te bakantaai aei, aio bon Banaan Tarawa". Ellice: "Talofa katoa koutou i te fakaafiafi nei, mea nei ko te Sikungaleo o Tarawa".
INT-SIG: Four notes gong – **V.** by form letter.

HAWAII (U. S. State)

L.T: GMT – 10 h – **Pr.L:** English, Japanese, Filipino, Chinese, Okinawan.
PRIVATE STATIONS (Comm.): Abbrev: E=English, J=Japanese, F=Filipino, C=Chinese, O=Okinawan, S=Samoan, AI=All Island.

Call	kc	kW	Network
1) KMVI	550	1	NBC, AI
2) KGMB	590	5	CBS
3) KORL	650	10	Indep.
4) KULA	690	10	Indep.
5) KGU	760	10	NBC
6) KIKI	830	0.25	Indep.
7) KIMO	850	1	Kaiser
8) KAIM	870	5	Indep.
9) KAHU	920	10	Indep.
2) KHBC	970	1	CBS
10) KTRG	990	5	Indep.
11) KHVH	1040	5	Kaiser
12) KHAI	1090	5	Indep.
13) KIPA	1110	1	AI
14) KLEI	1130	1	Indep.
15) KOHO	1170	1	Indep.
16) KZOO	1210	1	
17) KNDI	1270	5	Indep.
18) KNUI	1310	1	
19) KPOI	1380	5	Indep.
20) KTOH	1490	0.25	NBC
21) KUMU	1500	1	Indep.

1) **Maui Publishing Co**, P.O. Box 550, Wailuku, Maui. **L.P:** Gen. Mgr: R.E. Mawson. **D.Prgr:** 15.00–09.00 in E, J, F.
2) **Hawaiian Broadc. System**, P.O. Box 581, Honolulu 14. **L.P:** Gen. Mgr: J.L. Herold. Dir. Tec: R. Miyahara. **D.Prgr:** KGMB 15.00–10.00 in E, KHBC 15.30–10.00 in E, J, F. **V.** by letter. Rp.
3) **R. Hawaii Inc**, 2424 Kalakaua Ave, Honolulu 15. **L.P:** St. Mgr: D. Collins. Dir. Tec: T. Sax. **D.Prgr:** 24 h in E. **N:** 5 min before the h. **V.** by letter. Rp.
4) **KULA Broadc. Co**, P.O. Box 1479, Honolulu 15. **L.P:** Gen. Mgr: M. Hebdon. **D.Prgr:** 24 h in E, F.
5) **Communications Hawaii Inc**, P.O. Box 3110, Honolulu 2. **L.P:** Gen. Mgr: W.O. Paine. **D.Prgr:** 15.00 (Sat 14.30)–11.00(Sun 10.00) in E, J, F.
6) **KIKI Ltd**, 331 Kamani St, Honolulu 13. **L.P:** Gen. Mgr: A.J. Rossi. **D.Prgr:** 24 h in E, C, F, J, O.
7) **Kaiser Broadcasting**, P.O. Box 1497, Hilo. **L.P:** Gen. Mgr: J.E. Jaeger. **D.Prgr:** 15.00–10.00 in E, J, F.
8) **Christian Broadc. Assoc**, P.O. Box 375, Honolulu 16. **L.P:** Gen. Mgr: C. Keur. **D.Prgr:** 14.30–10.00 in E, F, C, J. **FM:** 95.5Mc 37kW: 16.00–10.00.
9) **Rural Broadc. Co**, P.O. Box 1007, Waipahu, Oahu. **L.P:** Gen. Mgr: H.E. Chu. Dir. Tec: R. Pearson. **D.Prgr:** 15.30 F, 16.30 E, 03.00 J. **N:** on the h.
10) **Ala Moana Broadc**, 2227-A Kalakaua Ave, Honolulu 15. **L.P:** Gen. Mgr: P.W. Carle. **D.Prgr:** 24 h in E, J, F.
11) **Kaiser Broadcasting**, 1290 Ala Moana Blvd, Honolulu 14. **L.P:** Gen. Mgr: D. Kawakami. **D.Prgr:** 15.00–08.30 in E, J, F. **V.** by letter. Prgr. schedule free.
12) **Royal Broadc. Co. Inc**, 2259 Kalakaua Ave, Honolulu 15. **L.P:** Gen. Mgr: R. L. Bowen. **D.Prgr:** 24 h in E.
13) **Big Island Broadc. Co**, P.O. Box 1602, Hilo. **L.P:** Gen. Mgr: R.W. Jaderstrom. **D.Prgr:** 15.00–10.00 in E, J, F.
14) **Oahu Broadc. Co**, Kailua, Oahu. **L.P:** Gen. Mgr: J. Irvin. **D.Prgr:** 15.59–10.00 in E.
15) **Cosmopolitan Broadc. Co**, 1140-A, 12th Ave, Honolulu 16. **L.P:** Dir. Gen: H. Sato. Dir. Tec: R. Fernie. **D.Prgr:** 14.00(Sun 15.00)–09.00 (W: 14.00 F, 15.00 J, Sun: 15.00 J, 20.00 C, 22.00 F, 00.00 J). **N:** every h. **V.** by QSL-card. Rp.
16) **Polynesian Broadc. Inc**, 250 Word Ave, Suite 209, Honolulu. **L.P:** Gen. Mgr: H.Y. Tateishi. **D.Prgr's** in J, E, O.
17) **R. St. KNDI**, P.O. Box 1516, Honolulu. **L.P:** Gen. Mgr: J.T. Ownby. **D.Prgr:** 16.00–10.00 (Sun 16.00–09.00) in E. **Korean** Sat. **German** Sun.
18) **KNUI Broadc. Co**, Box 1310, Wailuku Maui. **D.Prgr's** in E, J, F.
19) **KPOI Broadc. Co**, 1701 Ala Wai Blvd, Honolulu 15. **L.P:** Gen. Mgr: F. Hollinger. **D.Prgr:** 24 h in E. **FM:** 97.5Mc 50kW: 14.00 (Sat/Sun 13.00)–09.00 (Sat 10.00).
20) **Garden Island Publishing Co**, Box 1748 Lihue, Kauai. **L.P:** Gen. Mgr: C.J. Fern. **D.Prgr:** 15.30–08.30 in E, F.
21) **John Hutton Corp**, 1148 – 12th Ave, Honolulu 16. **L.P:** Gen. Mgr: J. Weiser Jr. **D.Prgr:** 24 h in E.

MARIANAS ISLANDS (U.S. Territory)

L.T: GMT+10 h – **Pr.L:** English, Chamorro, Philippine dialects.

RADIO GUÀM (Pr. Comm.)

FI: By adv – **ADDR:** P.O. Box 368 Agana, Guam. **Cable:** Kuam. **Te:** 7961 – **L.P:** Pres: P. Berg, Resident Mgr: R.A. Jordan.
STATION: KUAM 610kc 1kW – **HOME SCE. in English:** 20.00(Sun 21.00)–14.00(Sat 15.00) – **N:** Every h on the h.
ANN: "Kuam Agana, Guam" – **INT-SIG:** Voice & Jingle Form (Orchestra & Voices) – **V.** by letter and QSL-card – **PUB:** Prgr. schedule free. Write to: Resident Mgr. P.O..Box 368 Agana. Guam, M.I.

ARMED FORCES RADIO & TV SERVICE: see USA.

MARSHALL ISLANDS (U.S. Trust Terr.)

L.T: GMT+12 h – **L:** English.
ARMED FORCES RADIO & TV SCE. (Eniwetok and Kwajalein): see USA.

NEW CALEDONIA (French)

L.T: GMT+11 h – Pr.L: French.

RADIO NOUMEA (Go. – R. diff. Télévision Française)
AD: 19.00–20.00, 00.00–01.00, 01.15–01.20, 07.45–08.00.
ADDR: B.P. 327, Noumea. Cable: Radio Noumea. Te: 2856 – L.P: Dr. Le Leizour. Dir. Tec: Th. Siret.
STATIONS (System TRT).
1400kc 214m 8kW – 3355kc 89.45m 4kW – 7170kc 41.48m 4kW.
HOME SCE. in French, Bichelamar (Pidgin), Wallisian: W 19.00–20.15, 00.00–02.00, 07.00–10.30. Sun 21.00–02.00, 07.00–10.30.
N. in French: 19.30, 19.55, 01.00, 08.00, 10.25 –
For New Hebrides: Thurs 07.00–07.30. Wallisian (for Wallis and Futuna Isl.) Fri 07.00–07.15.
ANN: "Ici Noumeá, Radiodiffusion Télévision Française" – INT-SIG: Call of the cagou bird – V. by QSL-card. Rp. Records accepted.

NEW HEBRIDES

L.T: GMT+11 h – Pr.L: English, French, Pidgin-English.

RADIO PORT VILA (Go.)
ADDR: Anglo-French Condominium Administration, Port Vila, New Hebrides, So. Pacific – L.P: Eng. in Chief: R.A. Robinson.

STATION: 3277kc 91.55m 1kW.
The st. is off air at present except for special tests at indefinite times. Refer all communications regarding English prgr's to Inf. Officer British Residency, Vila, and regarding French prgr's to "Bureau d'Information, Residence de France, Port Vila.

NEW ZEALAND

L.T: GMT+12 h – Pr.L: English, Maori.

NEW ZEALAND BROADCASTING CORPORATION
(Statutory Public Body)
FI: By license payments and adv – AD: St's other than YA, YC and YZ. St's broadc. adv on W – ADDR: P.O. Box 98, Wellington. Cable: Broadserv. Te: 48-200 – L.P: Dir. Gen: G. H. Stringer. Dir. of Engineering: W. L. Harrison. Dir. Sound Broadc: L. R. Sceats. Dir. TV: N. R. Palmer.
HOME SCE. in English: ** exc. Sun 11.30–17.00.

	Call	kc	m	kW	h of tr.
Wellington	2YA	570	526	100	24 h**
Christchurch	3YD	630	476	2	21.00–10.00
Alexandra	4YX	640	468	2	18.00–11.20
Wellington	2YC	660	455	60	05.00–11.00
Christchurch	3YA	690	434	20	18.00–11.20
Invercargill	4YZ	720	416	5	18.00–11.20
Greymouth	3ZA	750	400	2	18.00–21.00
Auckland	1YA	760	395	20	18.00–11.20
Dunedin	4YA	780	384	20	18.00–11.20
Rotorua	1YZ	800	375	10	18.00–10.30
Invercargill	4ZA	820	366	10	18.00–12.00
Masterton	2XB	840	357	2	18.00–10.30
Napier	2YZ	860	349	5	19.00–10.30
Auckland	1YC	880	341	10	05.00–11.00
Dunedin	4YC	900	333	10	05.00–11.00
Greymouth	3YZ	920	326	10	18.00–10.30
Palmerston No	2ZA	940	319	2	18.00–10.30
Christchurch	3YC	960	312	10	05.00–11.00
Whangarei	1XN	970	309	2	18.00–11.00
Wellington	2ZB	980	306	20	18.00–12.00
Tauranga	1ZD	1000	300	10	18.00–02.00, 05.00–10.30
Gisborne	2XG	1010	297	0.1	18.00–11.00
Dunedin	4ZB	1040	288	10	18.00–12.00
Auckland	1ZB	1070	280	10	18.00–12.00
Christchurch	3ZB	1100	273	10	18.00–12.00
Wellington	2YD	1130	265	2	21.00–10.00
Hamilton	1YW	1140	262	2	18.00–11.20
Timaru	3XC	1160	258	2	18.00–11.00
Gisborne	2YW	1180	255	2	07.00–10.30
Wanganui	2XA	1200	250	2	18.00–11.00
Kaikohe	1XE	1220	245	2	18.00–11.00
Auckland	1YD	1250	240	2	21.00–10.00
Napier	2ZC	1280	234	2	
Hamilton	1XH	1310	229	2	18.00–12.00
Nelson	2XN	1340	224	2	18.00–11.00
Rotorua	1ZC	1350	222	2	18.00–02.00, 05.30–10.30
New Plymouth	2XP	1370	219	2	18.00–11.00
Wellington°	2YX	1400	214	2	07.30–11.00
Dunedin	4XD	1430	210	0.25	*
Kaitaia	1XA	1440	208	2	18.00–11.00
Westport	3YW	1460	205	2	18.00–10.30

° Only on the air when Parliament is being broadc. by 2YA. * Wed, Thurs 06.00–10.45, Sat 08.30–10.00, Sun 21.30–00.30.

N: 16.00(Tues–Sun) (BBC)[1], 18.00(BBC)[2], 18.15[3](W). 18.30[2](W), 18.45[3](W), 19.00[4], 19.15[3](Sun[9]), 19.30[4], 19.45[3](Mon–Fri), 20.00(BBC)[4], 20.15[3], 20.30[4], 20.45[3](Mon–Fri), 21.00[4], 22.31[5](Mon–Fri), 00.15[10], 00.30[4], 01.15[4], 01.30[10], 03.31[5](Mon–Fri), 06.00[4], 06.15[3], 07.00[4](Mon–Fri), 09.00[6], 09.30[7], 11.00(BBC)[8], 11.30[9](W).
[1] 2YA only – [2] YAs, 3YZ, 1YW only – [3] ZBS, ZAS, ZCS, 1XH, 1XN, 1ZD, 2XG, 2XP, 2XA, 2XB, 2XN, 3XC – [4] YAs, YZs, 1YW – [5] all st's exc. YDs – [6] YAs, YZs, 1YW, 1XN, 2XP, 2XN, 2XA, 2XG, 3XC – [7] ZBs, ZAs, ZCs, 1ZD, 1XH, 2XB – [8] YAs, 1YW, 4YZ – [9] ZBs, ZAs, 1XH, 2ZC – [10] ZBs, ZAs, 2ZC, 1XH, 2XB, 1XN, 2XC, 2XP, 2XA, 2XN, 3XC.
N. in Maori: Sun 05.50 – Wrp: 19.15, 00.30, 09.00 – Rlg: W 22.00, Sun 23.00, 07.00 – L.L: French: Mon 02.45 (Feb–Aug) – Quiz Prgr's: 07.00(Mon), 08.00(W exc. Fri).

FOREIGN SCE: R. New Zealand.
ADDR: P.O. Box 98, Wellington. Cable: Broadserv. Te: 48-200 – L.P: Distr. Mgr: J.L. Harstonge. Dir. Tec: A.S. Chisholm. Prgr. Officer: H.W. Taylor-Smith.
STATIONS: 7.5kW.

Call	kc	m	Call	kc	m	Call	kc	m
ZL7	6080	49.34	ZL2	9540	31.45	ZL21	15110	19.85
ZL18	9520	31.51	ZL3	11780	25.47	ZL4	15280	19.63

Two freq's are used simultaneously, and as the prgr. sched. is intended primarily for Australia and the Pacific Islands, the present aerials are beamed in those two directions. HS=Home Sce. prgr's.
To Pacific Islands: 17.00–19.45 HS on 6080, 9520kc; 20.00–05.45 HS on 15280kc; 06.00–08.45 Special prgr. on 6080, 9540kc. (On Sun tr. on 6080 kc ends at 08.00).
To Australia: 20.00–22.30 HS on 9520kc; 22.45–05.45 (Sun 20.00–02.00, 03.00–05.45) HS on 15110kc; 09.00–11.45 Special prgr. on 6080, 9540kc.
"Calling Antartica" (a prgr. of N, sporting review, "Family Corner" directed to N.Z. scientific personnel in the Ross Dependency): Sun 02.15–02.45 on 11780kc, 08.15–08.45 on 6080kc – "Calling Samoa" (in Samoan): Tues 07.00–07.30 – "Calling the Cook Islands and Niue" (in Rarotongan and Niuean): Wed 07.45–08.05, Sat 08.00–08.20 (repeat).
New Zealand News: 00.45, 07.00, 10.00 – Rlg: W (in N.Z.) 22.00, Sun (in N.Z.) 23.00 – DX-Prgr. (Arthur Cushen's DX World) 1st Wed in month: 06.40, 10.30, also Sun following the 1st Wed at 01.00 – "Lookout": Sat 09.13, Sun 06.30 – "Point of View": Sun 09.13, Mon 07.00 – "Mailbox": Fri 07.00, 09.45 – Maori Music: Thurs 06.45, Fri 08.15, 09.00, Sun 10.15 – "This is N.Z.": Sun 07.45, 10.30, Tues 08.15, 09.30 – Prgr. Previews: 21.30, 00.50, 06.09, 08.40, 08.55, 11.40.

ANN: "This is R. New Zealand" – INT-SIG: Call of the N.Z. Bell bird (at 5 second intervals) – V. by QSL-card (sea mail). Re. to Distr. Mgr, P.O. Box 2396, Wellington – PUB: "The N.Z. Listener" (Home Sce) 39sh (NZ) yearly. Prgr. sched. (free to overseas listeners) – F.PL: 5×2kW mw-tr's.

Wilhelm Franz KG, Germany, delivered EMT studio equip.

NORFOLK ISLANDS (Austral. Terr.)

L.T: GMT+11½ h – Pr.L: English.

NORFOLK ISLAND BROADCASTING SERVICE (Go.)
Owned by the Norfolk Islands Adm. and under the technical direction of the Dept. of Civil Aviation.

ADDR: Norfolk Islands Administration, Norfolk Island.
L.P: Officer in charge: R.M. Pierce.
STATION: VL2NI 1570kc 0.05kW.
HOME SCE. in English: 21.00–22.00. N: 21.00, 21.45.

ANN: "Norfolk Island Broadc. Sce, St. VL2NI" – V. by letter. Rp.

PAPUA and NEW GUINEA

(Australian Territory & Australian Trust Territory of New Guinea)

L.T: GMT+10 h – Pr.L: English, Pidgin, Tolai.

RADIO RABAUL (Go.)
ADDR: Adm. Broadc. St. P.O. Box 71, Rabaul. Cable: Adcast. Te: 2700 – L.P: St. Mgr: H.H. Leigh S. Dir. Tec: W. Murphy.
STATION: 0.25kW:
VL9BR 2340kc 128.40m – 3385kc 88.63m – 4840kc 61.98m.
HOME SCE: 07.00–12.30(Fri, Sat 13.00) – N: English: 08.00, 09.00. Tolai: 08.10, 10.00. Pidgin: 08.05, 10.30, 11.30, 12.00 – Wrp. & Shipping Inf. (in Pidgin), 08.45.

ANN: E: "This is R. Rabaul, Station VL9BR" – Tolai: "Ava vala-vala-Ongore R. Rabaul VL9BR" – Pidgin: "Yupela wok lang harim R. Rabaul VL9BR, Stesin Bilong Yumi" – V. by letter. Records accepted – F.PL: 10kW.

NORTH AMERICA
GREENLAND
1:40 Mill.
KM
0
500
1000
2000
Arctic Ocean
Baffin Bay
Davis Strait
Denmark Strait
Hudson Bay
GULF OF MEXICO
CARIBBEAN SEA
ATLANTIC OCEAN
NORTH PACIFIC OCEAN
GREENLAND
ALASKA
CANADA
UNITED STATES
MEXICO
CENTRAL AMERICA
COLUMBIA
VENEZUELA
Yukon
North West Territories
British Columbia
Alberta
Saskatchewan
Manitoba
Ontario
Quebec
Labrador
Washington
Oregon
Idaho
Montana
Wyoming
Nevada
California
Arizona
Utah
Colorado
New Mexico
N. Dakota
S. Dakota
Nebraska
Kansas
Oklahoma
Texas
Minnesota
Iowa
Wisconsin
Michigan
Illinois
Indiana
Ohio
Kentucky
Tennessee
Mississippi
Alabama
Georgia
Louisiana
Florida
Missouri
Arkansas
Pennsylvania
New York
Maine
Connecticut
Massachusetts
Delaware
Maryland
Virginia
N. Carolina
S. Carolina
Bahama Islands
CUBA
HAITI
JAMAICA
PUERTO RICO
DOMINICAN REP.
BR. HONDURAS
SAN JOSE
PANAMA
MEDELLIN
MARACAIBO
MERIDA
GRAND FALLS
GANDER
ST. JOHN'S
ST. PIERRE
New Foundland
SYDNEY
SACKVILLE
HALIFAX
SAINT JOHN
WOODSTOCK
MONCTON
DRUMMONDVILLE
CHICOUTIMI
QUEBEC
TROIS RIVIERES
VERCHERES
MONTREAL
OTTAWA
TORONTO
LONDON
DETROIT
WINDSOR
PORT ARTHUR
FORT WILLIAM
SUDBURY
TIMMINS
PITTSB.
BUFFALO
NEW YORK
BOUND BROOK
PHILADELPHIA
WASHINGTON
RICHMOND
RALEIGH
CHARLOTTE
ATLANTA
BIRMINGHAM
NASSAU
MIAMI
HOLLYWOOD
NEW ORLEANS
HOUSTON
CORPUS CHRISTI
SHREVEP.
DALLAS
FORT WORTH
OKLAHOMA CITY
LITTLE ROCK
MEMPHIS
NASHVILLE
LOUISVILLE
CINCINNATI
INDIANAPOLIS
CHICAGO
WATERLOO
DESMOINES
OMAHA
K. CITY
LAWRENCE
TULSA
ST. LOUIS
ST. PAUL
MINNEAPOLIS
WINNIPEG
BRANDON
LETHBRIDGE
MEDICINE HAT
REGINA
WATROUS
SASKATOON
PRINCE ALBERT
CHURCHILL
NELSON
FORT SMITH
HAY RIVER
YELLOW-KNIFE
WHITEHORSE
DAWSON
FAIRBANKS
ANCHORAGE
CORDOVA
INUVIK
THULE
UPERNAVIK
GODHAVN
ANGMAGSSALIK
KOOK
GODTHÅB
FREDERIKSHÅB
KOVIK
SCHEFFERVILLE
GOOSE BAY
EDMONTON
KAMLOOPS
VANCOUVER
KELOWNA
CALGARY
VICTORIA
SEATTLE
SPOKANE
PORTLAND
SACRAMENTO
DIXON
SAN FRANCISCO
FRESNO
DELANO
HOLLYWOOD
LOS ANGELES
TIJUANA
MEXICALI
ENSENADA
SALT LAKE CITY
DENVER
ALBUQUERQUE
CIUDAD JUAREZ
HERMOSILLO
CHIHUAHUA
CIUDAD OBREGON
PIEDRAS NEGRAS
CIUDAD ACUÑA
NUEVO LAREDO
SABINAS
REYNOSA
RIO BRAVO
TORREON
CULIACAN
MONTERREY
SALTILLO
ZACATECAS
LA PAZ
ROSARIO
TAMPICO
S. LUIS POTOSI
GUADALAJARA
LEON
IRAPUATO
MEXICO CITY
ZAMORA
MORELIA
URUAPAN
JALAPA
VERA CRUZ
PUEBLA
ORIZABA
VILLA HERMOSA
TUXTLA GTRREZ
OAXACA
ZITACUARO
ACAPULCO
GUATEMALA CITY
SAN SALVADOR
TEGUCIGALPA
MANAGUA
MERIDA
BELIZE
PETIONVILLE
KINGSTON
HABANA
SANTIAGO DE CUBA
GONAIVES
CAP HAITIEN
PUERTO PLATA
SANTIAGO
LA VEGA
SANTO DOMINGO
LA ROMANIA
S. JUAN
CIUDAD TRUJILLO
SAN CRISTOBAL
PORT AU PRINCE
70°
60°
50°
40°
30°
20°
10°
140°
130°
120°
110°
100°
90°
80°
70°

RADIO WEWAK (Go.)
ADDR: P.O. Box 65, Wewak. **Te:** 98. **Cable:** "Adcast".
L.P: St. Mgr: R. Wilson.
STATION: VL9CD 3335kc 89.95m 10kW.
HOME SCE. in English & Melanesian Pidgin: 07.30–12.30.
N. in English: 08.00 (Mon–Fri), 08.53(Mon–Fri), 09.00(Sat/Sun only).
ANN: "Adm. broadc. St. R. Wewak" – V. by letter. Records accepted –
F.PL: Extension of broadc. hrs. to 06.00–12.30(Mon–Fri), 03.30–12.30 (Sat/Sun), 20.30–23.30(Mon–Sat).

RADIO KEREMA: VL8BK 3245kc 92.45m 0.25kW.
RADIO DARU: VL8BD 3304kc 90.80m 0.25kW.
RADIO GORORKA: VL9CG 2410kc 124.1m (due in 1965).
Projected St's: A total of 20st's are planned for this area. Next planned st's: Mount Hagen, Madang.

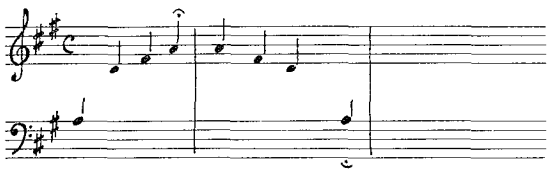
SAMOA (American)

L.T: GMT−11 h – **Pr.L:** Samoan, English.

RADIO STATION WVUV (Go.)
ADDR: Office of Samoan Information, P.O. Box 453, Pago Pago. **Te:** 648 – **L.P:** Gen. Mgr: B. MacKenzie. Dir. Tec: H. Cronin. Dir. Prgr: J.D. Giovannini.
STATION: WVUV 1120kc 10kW.
HOME SCE: 18.00–24.00, 05.00–08.00. **N: English:** Mon–Fri 18.30, Tues–Sat 05.45, Sat 22.00, 23.00, 24.00. **Samoan:** Mon–Fri 19.45–06.30, 07.30 – **Samoan Music:** 06.30 – **ANN:** E: "This is st. WVUV, Pago Pago, American Samoa" – V. by letter.

SAMOA (Western)

L.T: GMT−11 h – **Pr.L:** Samoan, English.
SAMOA BROADCASTING SERVICE 2AP (Go, Comm)
FI: By Go. appropriation & adv – **AD:** W 17.00–19.00, 05.00–09.30 mainly spots in English, Samoan – **ADDR:** P.O. Box 200, Apia. **Cable:** Voxpac. **Te:** 2 – **L.P:** Dir: J.W. Hoore. Prgr. Supervisor: L. Levi. Chief Eng: J.K. Brown.
STATIONS (System: AWA): 2AP Apia 1420kc 211.3m 10kW.
HOME SCE: English/Samoan: W: 17.00–20.00, 05.00–09.30. Sun: 20.00–23.00, 05.00–09.30. **English:** 05.00–06.30. **Samoan:** 06.30–09.30 – **English/Samoan:** Wed 17.00–20.00, Sun 20.00–23.00 – **N: English:** W: 18.00, 06.00 (from BBC, ABC or VOA), 06.15. **Samoan:** 07.30, 08.30. **Rlg** (Samoan): Sun 06.30–07.30.
ANN: E: "2AP, Apia, The Samoa Broadc. Service". Samoan: "Ole Sinfofoga Lenei o Samoa i Sisifo, Ole 2 AP i Apia". (The Voice of Western Samoa, 2AP Apia) – V. by QSL-card. Records accepted. Rp.
INT-SIG: Gong.



SOLOMON ISLANDS (British)

L.T: GMT+11 h – **Pr.L:** English, Pidgin-English, Vernaculars.

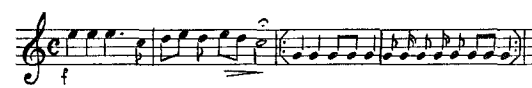
SOLOMON ISLANDS BROADCASTING SERVICE (Go.)
FI: By Go, license payments, adv – **AD:** Mon–Fri 07.30–10.00, Sat 09.00–10.00 – **ADDR:** P.O. Box 115, Honiara. **Cable:** Broadcasts. **Te:** 425 – **L.P:** Broadc. Officer: R. F. Calvert. Asst. Broadc. Officer: W. Bennett. Dir. Tec: P. Butler.
STATIONS: VQO 1030kc 291m 0.66kW – VQO3 3995kc 75.09m 5kW
HOME SCE: Mon–Fri 07.30–11.10, Sat. 08.59–11·15, Sun 08.59–11.20.
N. in English: 07.45(Mon–Fri), 09.15(BBC), 09.30(W), 11.00(ABC), 11.10(Sat) – **Pidgin English:** Mon–Fri 08.00–08.59. **N:** 08.15 – **Roviana:** Tues 08.30 – **ANN:** "This is the S.I.B.S, VQO and sw-tr. VQO3" – **INT-SIG:** Gong – V. by QSL-card. Re. must contain details to establish authenticity. Records accepted – **PUB:** Prgr-schedule free.

TAHITI (French)

L.T: GMT−10 h – **Pr.L:** French, Tahitian, Maori.

RADIO TAHITI (Go.)
AD: D 21.45–22.00, 03.45–04.00 – **ADDR:** Rue Dumont d'Urville 410, Papeete. **Cable:** R. Tahiti. **Te:** 243 – **L.P:** Dir: M. Espinasse. Dir. Tec: W. Copie, Y. Roche.
STATIONS (4kW): 1400kc – 6135kc 48.90m – 11825kc 25.37m
HOME SCE: W: 16.15–17.15, 21.30–23.00, 03.30–07.30. Sun: 20.00–23.00, 03.03–08.00.
French: 16.15–17.15, 21.45–23.00(W), 05.00–07.30(Sun 08.00). **N:** 22.15, 05.30 – **Tahitian:** 21.30–21.45(W), 03.50–05.00. **N:** 21.30(W), 04.00 – **Bilingual:** Sun 20.00–23.00.
Although times are GMT, calendar days apply to Tahiti only.
ANN: F: "Ici Tahiti, Radiodiff.-Télévision Française". Maori: "O Radio Tahiti Teie Te Reo O Farani I Patitifa" – **INT-SIG:** Tahitian flute (vivo) and drums.

Flute: Drums:

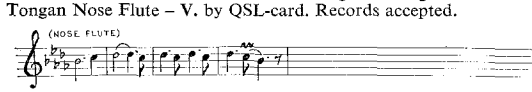


V. by QSL-card. Records accepted – **PUB:** Prgr.sched. free.

TONGA (Kingdom of)

L.T: GMT+13 h – **Pr.L:** Samoan, Fijian, Tongan, English.

TONGA BROADCASTING COMMISSION (Go.)
FI: By Go. assisted by revenue from adv – **AD:** In Tongan, English morning and evening; Samoan also in Overseas and Samoan prgr's. Also Hindustani in evening sessions – **ADDR:** P.O. Box 36, Nuku'alofa. **Cable:** Broadcom. **Te:** 105.
L.P: Mgr: R. E. Lavin. St. Eng: M. Holmes-Libbis.
STATION: ZCO 1020kc 10kW.
HOME SCE. in Tongan, English: 18.00–20.15, 05.30–10.00 (Tongan, English, Samoan). **N: Tongan:** 19.00, 06.15. **English:** 18.00(BBC), 07.00(ABC), 07.15(NZBC) – **Wrp** (for Tonga, Niue, Samoa, Fiji): At end of N. and 19.15 – **Samoan:** Wed, Thurs 09.00 – **Tongan Music:** 18.30, 19.30, 06.00, 06.30 – **Overseas Musical Prgr:** 07.00–10.00 – **Pacific Requests:** Mon 07.30–10.00 (Samoan, Fijian, Tongan, English).
ANN: E: "This is the Call of the Friendly Islands "ZCO Nuku'alofa of the Tonga Broadc. Commission". Tongan: "Ko e Ui 'eni'a e 'Otu Felenite, mei he ZCO Nuku'alofa 'a e Komisoni Fakamafola Lea Tonga". Samoan: "O le siu fofoga leni o le otu motu o Tonga, ZCO Nuku'alofa o le Komesinio Faasalalaunga o Tonga" – **INT-SIG:** Tongan Nose Flute – V. by QSL-card. Records accepted.



BERMUDA (British)

L.T: GMT−4 h – **Pr.L:** English.

BERMUDA BROADCASTING CO. LTD. (Comm.)
FI: By adv – **ADDR:** Box 452, Hamilton. **Cable:** ZBM Bermuda. **Te:** 2-1122 – **L.P:** Man. Dir: W. Staskow, Mgr: G. Robinson. Dir. Tec: J.H. Spershott.
STATIONS 1kW: ZBM1 1235kc – ZBM2 1340kc – FM: 89.1Mc.
HOME SCE in English: On 1235kc: 24 h – On 1340kc: 24 h.
N, Wrp: 10.55, 11.45, 13.00, 15.00, 16.45, 18.00, 19.00, 20.00, 21.00, 22.00, 23.00, 01.00, 02.05, 03.30, 04.00, 04.30, 05.00.
T.S: every 1/4 h – **Portuguese:** 09.45–10.15 on 1235kc.
ANN: "This is ZBM Radio Bermuda" – V. by QSL-card Rp. Records accepted.

CAPITAL BROADCASTING CO. LTD.
ADDR: Box 652, Pembroke – **L.P:** Dir. Gen: M. E. Sheppard. St. Mgr: A. Seymour. Dir. Tec: V. Dyer – **STATION:** ZFB1 960kc 1kW.
HOME SCE: 24 h in English – **N:** 10.55*, 11.30, 12.25, 14.00*, 16.30, 17.25, 19.00*, 20.55*, 22.45*, 02.55*, 06.00*, 08.00*. * Headlines.
ANN: "This is your favourite R. Station ZFB1 Pembroke, Bermuda 960 on your dial" – V. by letter – **PUB:** Prgr.schedule on request.

WANTED
Subscription Agencies in countries other than the United States. Write for full details.
World Radio TV Handbook Co. Ltd.
Sundvej 6, Hellerup, Denmark.

CANADA

L.T: See Time Table – **Pr.L:** English, French.
Abbreviations: Nf=Newfoundland, NS=Nova Scotia, PEI=Prince Edward Isl. NB=N. Brunswick, P=Pacific, Qu=Quebec, O=Ontario, M=Manitoba, Sa=Saskatchewan, Al=Alberta, BC=British Columbia, W=Winnipeg, Pr=Province, Prince R=Prince Rupert, NWT=No. W. Territories.

CANADIAN BROADCASTING CORPORATION INTERNATIONAL SERVICE (Publicly-owned)

ADDR: Canadian Broadcasting Corporation, International Service, P.O. Box 6000, Montreal. **Cable:** Intrad.
L.P: Dir: C. R. Delafield. Supervisor of Sections: A. L. Pidgeon. Supervisor of Eng. Sce: S. B. Duke. Supervisor of Inf. Sce: K. D. Renner. Coordinator of Transcription Services: G. Poupart. Head Eng. Sce: P.A. Tallman; Head French Sce: J.M. Marcotte; Head Latin American Sce: P. Marcos Bilbao. Supervisor of TV Prod: G. Delanoe.

STATIONS: All international sw. broadcasts from Canada are directed by CBC International Service, which is owned by the people of Canada. All prgr's are sent by landline from Montreal to Sackville, New Brunswick, on Canada's Atlantic coast, whence they are transmitted by three 50kW tr's.

kc	m	kc	m	kc	m	kc	m
5955	50.38	9625	31.17	11760	25.51	15320	19.58
5970	50.25	9630	31.15	15190	19.75	17820	16.84
5990	50.08	11720	25.60				

Schedule: Nov 64–April 65.

EUROPEAN SERVICE: 05.55–06.30, 10.55–18.30, 20.00–21.50. 05.55–06.30 on 5955kc, 10.55–12.15 on 11720/15320kc (Nov–Feb) 15320/17820kc (March/April), 1315–13.45 on 15320/17820kc, 13.45–15.15 on 11720/15320/17820kc, 15.15–15.30 on 15320/17820kc, 15.30–16.30 on 11720/15320/17820kc, 16.30–17.00 on 15320/17820kc 17.00–18.30 on 11720/15320/17820kc 20.00–21.50 on 9630/11720/15320.

Time	Program	News
05.55–06.30	Forces Relay	English 06.00, French 06.20.
10.55–12.15	Forces Relay	English 11.00, 12.00; French 11.40.
12.15–13.15	English	12.16
13.15–13.45	French	13.16
13.45–14.15	Ukrainian	
14.15–14.45	Russian	
14.45–15.15	Czech/Slovak	
15.15–15.30	News	English 15.16, French 15.22
15.30–16.00	Polish	
16.00–16.15	Russian	
16.15–16.30	Czech/Slovak	
16.30–17.00	Forces Relay	English 16.32, French 16.50
17.00–17.15	Polish	
17.15–17.45	Czech/Slovak	
17.45–18.15	German	
18.15–18.30	Hungarian	
20.00–20.45	French	20.01
20.45–21.15	Forces Relay	French 20.45, English 21.00
21.15–21.50	English	21.37

N. AMERICAN & ANTILLES SERVICE
12.15–13.15 on 5970kc, 13.15–13.45 on 11720kc.
12.15–13.15 English **N:** 12.16; 13.15–13.45 French **N.** 13.16.

AFRICAN SERVICE
18.30–19.45 on 11720/15320/17820kc, 19.45–20.00 on 11720/15320kc (Nov 64–Feb 65), 18.30–20.00 on 9630/11720/15320kc (March/April) 18.30–19.15 English **N.** 18.33, 19.15–20.00 French **N.** 19.15.

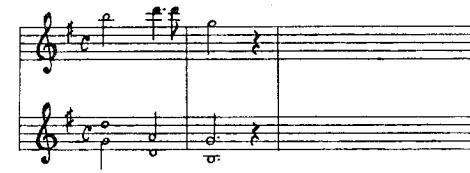
NORTHERN CANADA SERVICE (East Central, West)

10.55–12.15 on 5970kc	(Forces Relay)
15.15–15.30 on 11720kc	(N. in English and French)
16.30–17.00 on 11720kc	(N. in English and French)
21.55–22.46 on 5970/9625/11720kc	(English and French)
00.58–02.30 on 5970/9625/11720kc	(English)
02.30–07.05 on 5970/9625kc	(English)

CARIBBEAN & LATIN AMERICAN SERVICE
22.58–00.46 on 5990/9625/11760kc (Nov 64–Feb 65), on 9625/11760/15190kc (March/April).
22.58–23.30 English **N.** 23.01, 23.31–24.00 Portuguese **N.** 23.33, 00.01–00.46 Spanish **N.** 00.04.

AUSTRALASIAN SERVICE
07.15–08.50 on 5970/9625kc.
07.15–08.00 English **N.** 07.21, 08.00–08.50 English (Repeat) **N.** 08.06.
DX Prgr: In English: Sat 12.20, 18.52, 21.35, 23.20; Sun 07.25, 08.10. **In German:** Every Sun – **ANN:** E: "This is the International Sce. of the Canadian Broadcasting Corporation". F: "Ici Radio Canada". G: "This is Canada".

INT- SIG: First four notes of National Song "O Canada" (piano):



MESSAGE TO LISTENERS: The CBC International Service greets shortwave listeners everywhere, and welcomes reports, queries, and comments on reception and programs. Please write to: Box 6000, Montreal – V. by letter or QSL-card – **PUB:** CBC-Radio-Canada prgr.sched. published four times, a year and sent free upon request. **F.PL:** Expansion of the Sackville, NB, short wave plant.

CBC NATIONAL SERVICE (Publicly-owned).
ADDR: Head Office: P.O. Box 478, Terminal "A", Ottawa – **International Sce:** P.O. Box 6000, Montreal. **French Networks Div:** P.O. Box 6000, Montreal. **English Networks Div:** P.O. Box 500, Toronto. **Newfoundland Reg:** P.O. Box 5490, St. John's. **Maritime Reg:** P.O. Box 3000, Halifax. **Prairie Reg:** P.O. Box 160, Winnipeg. **British Columbia Reg:** 701 Hornby Str. Vancouver. **Ottawa Area:** P.O. Box 3220, Station "C", Ottawa. **Northern and Armed Forces Sces:** P.O. Box 478, Terminal "A", Ottawa. **Engineering Headquarters:** 7925 Cote Street, Luc Road, Montreal – **Offices outside Canada:** CBC Representatives: **New York:** Suite 2401, 1270 Avenue of the Americas, New York 20, N.Y. **London:** The Langham, Portland Place, London W.1, England. **Paris:** 17 Ave. Matignon, Paris 8, France. – **L.P:** Pres: J.A. Ouimet, Vice Pres: Capt. W.E.S. Briggs, Vice Pres. Programming: E.S. Hallman. Comptroller: V.F. Davies. Vice Pres. Personel & Operations: J.P. Gilmore: Vice Pres. Corporate Affairs: R.C. Fraser. Gen. Mgr. Reg. Broadc: C. Jennings. Gen. Mgr. English Networks: H.G. Walker. Gen. Mgr. French Networks: M. Ouimet. Dir. Eng. and Tech. Services: J.E. Hayes. **CBC Representatives:** Paris: J. Saint-Georges. London: S. Moore. New York, United Nations: F. Mutrie.

Call	kc	kW	Call	kc	kW	Call	kc	kW
1) CBN	640	10	10) CBM	940	50	18) CBU	690	10
2) CBG	1450	0.25	11) CBO	910	5	19) CFPR	860	10
3) CBT	540	10	12) CBL	740	50	20) CFGB	1340	1
4) CBY	990	10	13) CBE	1550	10	21) CFWH	570	1
5) CBI	1140	10	14) CBW	990	50	22) CHFC	1230	0.25
6) CBH	860	10	15) CBK	540	50	23) CFFB	1200	0.04
7) CBA	1070	50	16) CBX	740	50	24) CHAK	860	1
8) CBZ	1480	10	17) CBR	1010	50	25) CFYK	1340	0.25
9) CBD	1110	10						

1) P.O. Box 5490, St. John's, Nfld – 2) P.O. Box 790, Gander, Nfld – 3) P.O. Box 218, Grand Falls, Nfld – 4) P.O. Box 610, Corner Brook, Nfld – 5) P.O. Box 700, Sydney, N.S – 6) P.O. Box 3000 Halifax – 7) P.O. Box 1200, Sackville, N.B – 8) P.O. Box 1538 Fredericton, N.B – 9) St. John, N.B – 10) P.O. Box 6000, Montreal, Que – 11) P.O. Box 3220, Station "C", Ottawa, O – 12) P.O. Box 500, Toronto, O – 13) Security Bldg, University & Pelissier, Windsor, O – 14) P.O. Box 160, Winnipeg, Man – 15) P.O. Box 347, Regina, Sask – 16) P.O. Box 555, Edmonton, Alta – 17) 1724 Westmount Blvd, Calgary Alta – 18) 701 Hornby Str, Vancouver, B.C – 19) 343 W. 2nd Ave, Prince Rupert, B.C – 20) P.O. Box 237, Goose Bay, Lab – 21) P.O. Box 730, Whitehorse, Y.T – 22) Fort Churchill, Man – 23) P.O. Box 10, Frobisher Bay, N.W.T – 24) P.O. Box 1220, Inuvik, N.W.T – 25) P.O. Box 160, Yellowknife, N.W.T. +95 low power relay st's not mentioned.

Short Waves:
1) CBNX 6160kc 48.70m 0.3kW 11.00–04.00 (Relay CBN).
18) CBUX 6160kc 48.70m 0.5kW 14.00(Sun 15.00)–08.05(Relay CBU).
Note: Although times are in GMT, calender days apply to Canada only.

CBC RADIO STATIONS (French)

Call	kc	kW	Call	kc	kW	Call	kc	kW
1) CBAF	1300	5	3) CBF	690	50	5) CBOF	1250	10
2) CBV	980	5	4) CBJ	1580	10	6) CJBC	860	50

1) P.O. Box 950, Moncton, N.B – 2) Palais Montcalm, Que – 3) P.O. Box 6000, Montreal, Que – 4) 121 rue Racine Est, Chicoutimi, Que – 5) P.O. Box 3220, Ottawa O – 6) P.O. Box 500, Toronto, O
+21 power stations not mentioned.

FM-STATIONS:
CBF-FM Montreal 95.1Mc 24.6kW(French) – CBM-FM Montreal 100.7Mc 24.6kW – CBO-FM Ottawa 103.3Mc 0.38kW – CBC-FM Toronto 99.1Mc 11.9kW – CBU-FM Vancouver 107.5Mc 1.4kW.
F.PL: Radio low power relay tr's at Rogersville, N.B. (April 1965 – French). Larry's River and Canso, N.S. (June 1965 – English).

Wilh. Franz KG, Germany: EMT studio equip.

PRIVATELY OWNED COMMERCIAL STATIONS
CANADIAN ASSOCIATION OF RADIO AND TELEVISION BROADCASTERS: Head Office, 108 Sparks St, Ottawa 4.

Medium Waves: stations less 5kW not mentioned. °=Short Wave.

	Call	kc	kW		Call	kc	kW
1)	CFNB	550	50	64)	CKCH	970	5
2)	CHLN	550	10/5	65)	CFPL	980	10/5
3)	CJKL	560	5	66)	CHEX	980	5
4)	CKCN	560	5	67)	CKGM	980	10
5)	CJEM	570	5/1	68)	CKNW	980	10/5
6)	CFRA	580	50/10	69)	CKRM	980	10/5
7)	CHLC	580	5/2.5	70)	CKBW	1000	10
8)	CJFX	580	5	71)	CFRB	°1010	50
9)	CKPR	580	5/1	72)	CFGP	1050	10
10)	CKUA	580	10	73)	CHUM	1050	5/2.5
11)	CKY	580	50	74)	CJIC	1050	10/2.5
12)	VOCM	590	10	75)	CKSB	1050	10
13)	CKEY	590	5/1	76)	CJNB	1050	10
14)	CFCF	°600	5	77)	CFCN	°1060	10
15)	CFCH	600	10/5	78)	CJLR	1060	10
16)	CFQC	600	2	79)	CHOK	1070	5/1
17)	CJOR	600	10	80)	CHEC	1090	5
18)	CHNC	610	5	81)	CHRS	1090	10
19)	CKTB	610	10/5	82)	CKWX	°1130	50
20)	CFCL	620	10/2.5	83)	CKXL	1140	10
21)	CKCK	620	5	84)	CHSJ	1150	10/5
22)	CKCM	620	10	85)	CKOC	1150	5
23)	CFCY	630	5	86)	CKSA	1150	10
24)	CHED	630	10	87)	CKTR	1150	10/1
25)	CHLT	630	10/5	88)	CKY	1150	10/1
26)	CKRC	630	10	89)	CJOC	1220	10/5
27)	CHFA	680	5	90)	CKDA	1220	10
28)	CJOB	680	10/2.5	91)	CKCW	1220	10
29)	CKGB	680	10	92)	CKBL	1250	5
30)	CFRG	710	5	93)	CKOM	1250	10
31)	CKVM	710	10/1	94)	CHSM	1250	10
32)	CKAC	730	50	95)	CFRN	1260	50
33)	CKDM	730	10/5	96)	CHAT	1270	10
34)	CKLG	730	10	97)	CHWK	1270	10
35)	CFDR	790	5	98)	CJCB	°1270	10
36)	CFCW	790	10	99)	CHIQ	1280	5/2.5
37)	CKSO	790	10/5	100)	CJMS	1280	50/5
38)	CHAB	800	10/5	101)	CKCV	1280	10/5
39)	CHRC	800	10	102)	CFAM	1290	10/5
40)	CJAD	800	50/10	103)	CKSL	1290	5
41)	CJLX	800	10/5	104)	CFGM	1310	10/2.5
42)	CKOK	800	10/0.5	105)	CHGB	1310	5
43)	CKLW	800	50	106)	CKOY	1310	50
44)	CKRD	850	10/1	107)	CHQM	1320	10
45)	CKVL	850	50/10	108)	CKEC	1320	5
46)	CHML	900	5	109)	CKLB	1350	10/5
47)	CHNO	900	10/1	110)	CKBC	1360	10
48)	CJBR	900	10	111)	CKLC	1380	5
49)	CJVI	900	10	112)	CKPC	1380	10
50)	CKBI	900	10	113)	CJFP	1400	10/0.25
51)	CFJC	910	10/1	114)	CFMB	1410	10
52)	CJDV	910	5	115)	CFUN	1410	10
53)	CJCH	920	10/5	116)	CKFH	1430	10/5
54)	CKCY	920	10/5	117)	CKPM	1440	10
55)	CFBC	930	10/5	118)	CJOY	1460	10/5
56)	CJCA	930	10/5	119)	CKRB	1460	10/5
57)	CJON	930	10	120)	CFOX	1470	10/5
58)	CJGX	940	10/1	121)	CJQM	1470	5
59)	CKBB	950	10/2.5	122)	CKCR	1490	10/5
60)	CKNB	950	10/1	123)	CHFI	1540	50
61)	CFAC	960	10	124)	CFOR	1570	10
62)	CHNS	°960	10	125)	CHUB	1570	10
63)	CKWS	960	5	126)	CKLM	1570	10
				127)	CHVC	1600	10

Short Waves:

14)	CFCX	6005	0.075	Canadian Marconi Co, Montreal
98)	CJCX	6010	1	Cape Breton Broadcasters, Sydney
77)	CFVP	6030	0.1	The Voice of the Prairies, Calgary
71)	CFRX	6070	1	R. CFRB, Toronto
82)	CFKX	6080	0.01	R. CKWX, Vancouver
62)	CHNX	6130	0.5	Maritime Broadcasting Co, Halifax

Medium Waves:

1) **R. Atlantic Ltd,** 67 York St. Fredericton, NB – **D.Prgr:** 24 h.
2) **R. Trois Rivières Inc,** 522 rue Bonaventure, Trois-Rivières, Qu.
3) **Kirkland Lake Broadc. Ltd,** Woolwoth Bldg, Governm. R. d West, Kirkland Lake, O.
4) **R. Sept-Iles Inc,** Sept-Iles, Qu. **D.Prgr:** W 10.53–06.02(Sat 07.02) Sun 12.53–05.02. V. by letter.

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CANADIAN BROADCASTING CORPORATION
P.O. BOX 6000 ■ MONTREAL, CANADA

5) **Edmundston R. Ltd,** 99 Canada Rd, Edmundston, NB.
6) **CFRA Broadc. Ltd,** 150 Isabella Str, Ottawa, O. **L.P:** Gen. Mgr: T. Kielty. Chief Eng: G. Roach – **D.Prgr:** 24 h **N:** Every h on the h. **V.** by QSL-card or letter. Records accepted. Rp.
7) **R. Cote-Nord Inc,** 15 Blvd. Blanche, Hauterive, Cte Saguenay, Qu. **V.** by letter. Records accepted.
8) **Atlantic Broadc. Ltd,** St. Ninian St, Antigonish, NS.
9) **H. F. Dougall Co. Ltd,** 87 No. Hill St, Port Arthur, O.
10) **University of Alberta,** 10526 Jasper Ave, Edmonton, Al.
11) **Moffat Broadc. Ltd,** 432 Main St, North, Winnipeg, M.
12) **Colonial Broadc. System Ltd,** McBride's Hill, St. John's, NF – **D.Prgr:** 08.58–03.30 – **V.** by letter – 13) **Shoreacres Broadc. Co. Ltd,** 247 Devonport Rd, Toronto 5. **D.Prgr:** 24 h. **V.** by letter.
14) **Canadian Marconi Co.** 405 Ogilvy Ave, Montreal 15, Qu. **L.P:** Dir. Gen: S.B. Hayward. Dir. Tec: J.C. Douglas. **D.Prgr:** 10.30–06.00. **N:** Every h on the h. **V.** by QSL-card.
15) **Northern Broadc. Ltd,** 581 Fraser St, North Bay, O.
16) **A. A. Murphy & Son Ltd,** 216 First Ave. North, Saskatoon, Sa.
17) **CJOR Ltd, Hotel Grosvenor,** 846 Howe St, Vancouver, BC.
18) **La Cie Gaspésienne de Radiodiff. Ltée,** Rue Principale et Boul. Perron, New Carlisle, Qu.
19) **Niagara District Broadc. Co. Ltd,** 12 Yates St, St. Catharines, O – **L.P:** Gen. Mgr: M.C. Burgoyne. Dir. Tec: W.H. Allen. **D.Prgr:** 10.45(Sun 12.40)–05.15. **V.** by QSL-card or letter.
20) Timmins, O – 21) **Transcanada Communications Ltd,** P.O. Box 6200, Regina, Sa – 22) **Colonial Broadc. System Ltd,** Grand Falls, Nf.
23) **The Island R. Broadc. Co. Ltd,** 85 Kent St, Charlottetown, PEI.
24) **R. Station CHED Ltd,** 10006 – 107th St, Edmonton, Al.
25) **La Tribune Inc,** 221 Dufferin St, Sherbrooke, Qu – 26) **Transcanada Communications Ltd,** Free Press Bldg, 300 Carlton St, Winnipeg, M. **D.Prgr:** 24 h. **V.** by QSL-card and letter.
27) **R. Edmonton Ltd,** 10012 – 109e Rue, Edmonton, Al.
28) **R. CJOB Ltd,** 930 Portage Ave, Winnipeg 10, M.
29) **Timmins Broadc. Ltd,** Thomson Bldg, Timmins, O.
30) **R. Gravelbourg Ltée,** Gravelbourg, Sa – 31) **R. Témiscamingue Inc,** Rue-Saint-Anne, Ville-Marie, Qu – 32) **La Compagnie de Publication de "La Presse" Ltd,** 980 rue Sainte-Catherine-Ouest, Montréal, Qu.
33) **Dauphin Broadc. Co. Ltd,** Third Ave. N. E, Dauphin, M.
34) **Moffat Broadc. Ltd,** 1006 Richards St, Vancouver, BC. **D.Prgr:** 24 h. **V.** by letter.
35) **R. Dartmouth Ltd,** 66 Ochterkoney St, P.O. Box 1007, Dartmouth, NS. **V.** by letter. Records accepted. **F.PL:** 10kW – 36) **Camrose Broad. Co. Ltd,** 4832 – 50th St, St. Camrose, Al – 37) **CKSO R. Ltd,** 336 Ash St, Sudbury, O. **D.Prgr:** 13.00–07.00.
38) **CHAB Ltd,** 127 Main St, Moose Jaw, Sa. **D.Prgr:** 12.00–07.00.
39) **CHRC Ltée,** Edif. Metropolitan, 39 rue St.-Jean. Québec, Qu. **D.Prgr:** 11.00–07.00. **V.** by letter. Rp.
40) **CJAD Ltd,** 1407 Mountain St, Montreal, Qu. **D.Prgr:** 24 h. **V.** by QSL-card – 41) **Lakehead Broadc. Co. Ltd,** Fort William, O.
42) **CKOK Ltd,** 33 Carmi Ave, Penticton, BC. **L.P:** St. Mgr: R. Robinson – **D.Prgr:** 14.00–08.00. **N:** Every h on the h. **V.** by QSL-card or letter. Records accepted.
43) **Western Ontario Broadc. Co. Ltd,** 825 Riverside Dr. Windsor, O.
44) **Central Alberta Broadc. Co. (1961) Ltd,** 5405 Gaetz Ave, Red Deer, Al – 45) **R. Futura Ltd,** 21 Gordon Ave, Verdun, Qu. **D.Prgr:** 24 h. **V.** by letter. Rp.
46) **Maple Leaf Broadc. Co. Ltd,** 848 Main St. East, Hamilton, O.
47) **The Sudbury Broadc. Co. Ltd,** 166 Elm St. West, Sudbury, O.
48) **Lower St. Lawrence R. Inc,** 6 rue St.-Jean, Rimouski, Qu.
49) **Island Broadc. Co. Ltd,** 817 Fort St, Victoria, BC.
50) **Central Broadc. Co. Ltd,** CKBI Bldg, 10th St. Prince Albert, Sa.
51) **Inland Broadc. Ltd,** 387–4th Ave, Kamloops, BC.
52) **Dinosaur Broadc. (1957) Ltd,** Broadc. Bldg, Drumheller, Al.
53) **CJCH Ltd,** 741 Robie St, Halifax, NS.
54) **Algonquin R.-TV Co. Ltd,** 254 Queen St. East, Sault Ste. Marie, O.
55) **Fundy Broadc. Co. Ltd,** 68 Carleton St, Saint John NB. **D.Prgr:** 10.00–05.00(Sun 12.00–04.15). **V.** by letter.
56) **Edmonton Broadc. Co. Ltd,** 10113–104th St, Edmonton, Al.
57) **Newfoundland Broadc. Co. Ltd,** Prince of Wales St. St. John's, Nf.
58) **Yorkton Broadc. Co. Ltd,** 171 McDermot, Winnipeg, Man (tr at Yorkton, Sas). **L.P:** Gen. Mgr: G.G. Gallagher. Dir. Tec: H. Kerr. **D.Prgr:** 24 h – 59) **Barrie Broadc. Co. Ltd,** Box 519, Barrie, O. **D.Prgr:** 11.00–04.00. **V.** by letter. Records accepted.
60) **Restigouche Broadc. Co. Ltd,** Bank of Nova Scotia Bldg, Campbellton, NB – 61) **Calgary Broadc. Co. Ltd,** 1301–17th Ave. S.W. Calgary,
62) **Maritime Broadc. Co. Ltd,** 5230 Tobin St, Halifax, NS. **L.P:** Pres: G.W. Dennis. St. Mgr: F.W. Arenburg. Dir. Tec: A.W. Greig. **D.Prgr:** 24 h **N:** On the h. **V.** by QSL-card,
63) **Frontenac Broadc. Co. Ltd,** 170 Queen St, Kingston, O. **D.Prgr:** 10.30–06.30.
64) **La Compagnie de Radiodiff. CKCH de Hull, Ltée,** 72 Laval St, Hull, Qu – 65) **London Free Press Printing Co. Ltd,** 442–446 Richmond St, London, O – 66) **CHEX Radio,** Box 659, Petersborough, O. **D.Prgr:** 11.00–06.30. **V.** by QSL-card. Rp.
67) **Maisonneuve Broadc. Corp. Ltd,** Montreal, Qu.
68) **R. NW Ltd,** Windsor Hotel, 227 Colombia St, New Westminster,
69) **Western Communications Ltd,** 2060 Halifax St, Regina, Sa.
70) **Acadia Broadc. Co. Ltd,** Sawler Bldg, 399 King St, Bridgewater,
71) **CFRB Ltd,** 37 Bloor St. West, Toronto, O. **L.P:** Pres: W.C. Thornton Cran. Dir. Tec: C. Eastwood. **D.Prgr:** 24 h exc. Sun 07.05–12.00 **N:** Every half h 05.30–14.00, 15.00, 16.00, 16.50, 17.30, hourly 18.00–22.00, 22.50, 23.50, hourly 00.00–05.00. **Ann:** CFRX: "You are tuned to CFRX Toronto, Canada, broadc. in the 49 metre band on assigned freq of 6070kc. CFRX broadcasts the regular prgr. schedule of CFRB Toronto. **V.** by QSL-card.
72) **Northern Broadc. Corp. Ltd,** 9910 – 99th St, Grande Prairie, Al.
73) **R. CHUM-1050 Ltd,** 1331 Yonge St, Toronto 7, O.
74) **Hyland R.-TV Ltd,** Hyland Bldg, 119 East St, Sault Ste. Marie, O.
75) **R. Saint-Boniface Ltée,** 607 rue Langevin. Saint-Boniface, M.
76) **Northwestern Broadc. Co. Ltd,** 1721 Main St, North Battleford, Sa.
77) **The Voice of the Prairies Ltd,** Broadc. House, Calgary, Al. **L.P:** Gen. Mgr: H. Gordon Love. Dir. Tec: R.W. Lamb. **D.Prgr:** 24 h exc. Mon for 6 hrs (once a month) **N:** Hourly and 20.30. **V.** by QSL-card. Records accepted. **F.PL:** 50kW.
78) **CJLR Inc,** P.O. Box 4200, Quebec, Qu. **D.Prgr:** 12.00–09.00. **V.** by letter – 79) **Sarnia Broadc. Ltd,** 148 ½ N. Front St, Sarnia, O. **V.** by letter or QSL-card. Records accepted – 80) **Southern Alberta Broadc. Ltd,** 401 Mayor Magrath Drive, Lethbridge, Al. **D.Prgr:** 12.00–08.00. **V.** by letter. Records accepted – 81) **R. Iberville Ltd,** 40 Place du Mardie, St. Jean, Qu.
82) **CKWX R. Ltd,** 1275 Burrard St, Vancouver, BC.
83) **Bow Valley Broadc. Co. Ltd,** 210–9th Ave. West, Calgary, Al.
84) **New Brunswick Broadc. Co. Ltd,** 85 Germain St, Saint John, NB.
85) **Wentworth R. Broadc. Co. Ltd,** 73 Garfield St. South, Hamilton, O.
86) **Sask Alta Broadc. Ltd,** R.-TV Bldg, 5036-50th St, Lloydminster, Al – 87) **CKTR (1958) Ltée,** 543 rue Gervais, Trois-Rivières, Qu.
88) **Western Manitoba Broadc. Ltd,** 2940 Victoria Ave, Brandon, M.
89) **Lethbridge Broadc. Ltd,** 1015–3rd Ave. South, Lethbridge, Al.
90) **Capital Broadc. System Ltd,** P.O. Box 967, Victoria, BC. **D.Prgr:** 24 h. **V.** by letter. Rp.
91) **Moncton Broadc. Ltd,** Knights of Pythias Hall, Moncton, NB.
92) **La Compagnie de Radiodiff. de Matane Ltée,** 4 rue Saint-Screment, Matane, Qu. – 93) **Saskatoon Community Broadc. Co. Ltd,** Empire Hotel, Saskatoon, Sa – 94) **R. Southern Manitoba,** Altona, Man. **L.P:** Gen. Mgr: D.C. Barkman. Dir. Tec: J.J. Pauls. **D.Prgr:** 12.00–07.00 **N:** On the h and at 12.30, 13.30, 14.30, 18.30, 23.30, 00.45. **V.** by QSL-card. Records accepted – 95) **The Sunwapta Broadc. Co. Ltd,** Broadc. House, Postal St E, Edmonton, Al. **D.Prgr:** W 12.30–08.00(Sat 09.00), Sun 13.00–08.00. **V.** by QSL-card and/or letter.
96) **Monarch Broadc. Co. Ltd,** Box 880, Medicine Hat, Al. **D.Prgr:** W 12.55–08.00, Sun 13.55–07.00. **V.** by letter.
97) **Fraser Valley Broadc. Ltd,** 50 Yale Rd. East, Chilliwack, BC.
98) **Cape Breton Broadc. Ltd,** R. Bldg, 318 Charlotte St, Sydney, NS.
99) **CHIQ Ltd,** Hamilton, O.
100) **CJMS R.-Montreal Ltd,** 1700 St, Montreal, Qu. **L.P:** Gen. Mgr: R. Demers. **D.Prgr:** 24 h in French. **N:** Every half h. **V.** by letter.
101) **CKCV (Québec) Ltd,** 978 rue Saint-Jean, Quebéc, P.Q. **L.P:** Dir. Gen: M. Alain. Dir. Tec: L. Gobeil. **D.Prgr:** 11.00–07.00 in French. **N:** Every half h. **V.** by letter. Rp – 102) see 94).
103) **London Broadc. Ltd,** 343 Richmond St, London, O.
104) **R. Richmond Hill Ltd,** Richmond Hill, O.
105) **CHGB Ltée,** Rue Painchaud, Sainte-Anne-de-la-Pocatière, Qu.
106) **CKOY Ltd,** 635 Richmond Rd, Ottawa, O.
107) **Vancouver Broadc. Associates Ltd,** Vancouver, BC.
108) **Hector Broadc. Co. Ltd,** 130 George St, New Glasgow, NS.
109) **Lakeland Broadc. Co. Ltd,** 16 Centre St, Oshawa, O.
110) **Bathurst Broadc. Co. Ltd,** 455 Golf St, Bathurst, NB.
111) **St. Lawrence Broadc. Co. Ltd,** 99 Brock St, Kingston, O.
112) **The Telephone City Broadc. Ltd,** 525 Colborne St. East, Brantford, O. **D.Prgr:** 10.30–06.00 (Su: 09.30–04.00). **V.** by QSL-card.
113) **R. CJEP Ltée,** 1 Christophe Colomb St, Rivière-du-Loup, Qu.
114) **CFMB R. Montreal,** 2015 Drummond St, Montreal 25, Qu. **D.Prgr:** 24 h. **V.** by letter – 115) **R. CFUN Ltd,** 1900 W. 4th Ave, Vancouver 9, BC – 116) **Foster Hewitt Broadc. Ltd,** 1 Greenville St, Toronto, O.
117) **Confederation Broadc. (Ottawa) Ltd,** 140 Wellington St, Ottawa, O. **L.P:** Gen. Mgr: B. A. Savage. **D.Prgr:** 24 h. **V.** by QSL-card.
118) **CJOY Ltd,** 50 Wyndham St, Guelph, O.
119) **R. Beauce Inc,** 30 rue Saint-Antoine, Cté de Veauce, Qu.
120) **R. St. CFOX,** Box 1470, Montreal, Qu. **D.Prgr:** 10.00–06.00. **V.** by letter – 121) **Winnipeg Broadc. Associates Ltd,** 457 Main St, Winnipeg, Man – 122) **Kitchener-Waterloo Broadc. Co. Ltd,** 125 King St. W, Kitchener, O – 123) **Rogers Broadc. Ltd,** 13 Adelaine St. East, Toronto, O – 124) **R. Stn. CFOR Ltd,** 241 W. St. N, Orilla, O.
125) **Nanaimo Broadc. Corp. Ltd,** Malaspina Hotel, Front St, Nanaimo, BC – 126) **R. Laval Inc,** 1184 St. Catherine St. West, Montreal,
127) **R. Station CHVC Ltd,** 1745 River Rd, Niagara Falls, O. **D.Prgr:** 10.30(Sun 12.00)–05.00. **Italian:** Tues–Sat 00.30–01.00, Sat 21.30–

22.00. **Hungarian:** Sat 20.00–20.30. **Ukrainian:** Sat 20.30–02.30. Sun: mixture of English and other languages. **V.** by letter. **Rp.**

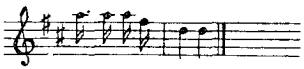
Continental Electronics, USA: delivered. **M.W. tr's: 250W:** CKOT Tillsonburg, Ont – **1kW:** CFOS Owen Sound, Ont, CHOT Tillsonburg, Ont, CFCO Chatham, Ont – **3kW:** CJJC Vancouver, B.C. – **5kW:** CHLN 1 Three Rivers, Que, CHLN 2 Three Rivers, Que, CKBI Prince Albert, Sask – **5/10kW:** CKRC Winnipeg, Man, CKRM Regina, Sask, CKCK Regina, Sask, CJCA Edmonton, Alta, CJNB No. Battleford, Sask, CJAD 1 Montreal, Que, CJAD 2 Montreal, Que, CKSB St. Boniface, Man, CJOC Lethbridge, Alta, CKYW Winnipeg, Man, CKXL Calgary, Alta, CHED Edmonton, Alta, CKOC Hamilton, Que, CBH/CHNS Halifax, N.S, CKCR Kitchener, Ont – **50kW:** CKWX Vancouver, B.C.

GREENLAND (Danish Territory)

L.T: GMT – 3 h – **Pr.L:** Greenlandic, Danish.

GRØNLANDS RADIO (Go.)

ADDR: Grønlands Radiofoni, Godthåb. **Cable:** Radiofoni. **Te:** 262 – **L.P:** Dir. Broadc: Fr. Nielsen.
STATIONS:
Godthåb 570kc 526 m 25kW Godhavn 650kc 461.5m 5kW
Frederikshåb 820kc 365.9m 5kW Godthåb FM 97.2Mc 0.25kW
HOME SCE: W 10.30–11.20, 15.00–16.05, 20.30–02.05, Sun 11.30–12.30, 15.00–02.05. **N:** W 15.30, 21.45, Sun 22.00 – **Wrp:** W 10.40, 16.00, 21.00, 02.00, Sun 12.25, 16.25, 22.30, 02.00 – **Prgr in Norwegian:** Sun 19.00–20.00 (only 15/4–1/10) – **Faroese:** 20.00–20.40 (only 15/4–1/10) – **For Schools:** Mon-Tues, Wed: 13.00–14.30, 16.10–16.40 –
ANN: "Kalâtdlit-nunâta râdiua – Grønlands radio..." **V.** by letter or card. **Rp – INT-SIG:** "Sunia kaligpok" (The Whaleboat "Sonja" drags Whale) played on celeste.
F.PL: 1.5kW sw-tr. in winter 1964. Test-tr's on 5960, 5980kc.



Brown Boveri, Switzerland: delivered two 25kW mw-tr's (Godhavn).

SAINT PIERRE ET MIQUELON (French)

L.T: GM – T3 h – **Pr.L:** French.

OFFICE DE RADIODIFFUSION TÉLÉVISION FRANÇAISE

FI: by French Go – **ADDR:** St. Pierre et Miquelon. **Cable:** ORTF. **Te:** 051 – **L.P:** Dir: C. Ballon. Dir. Tec: L. Langlois.
STATION (System TRT): 1375kc 218.2m 4kW.
HOME SCE in French: W 10.00–12.00, 15.00–16.30(Thurs, Sat 18.00), 21.00–01.00. Sun 12.30–18.00, 21.00–01.30. **N:** 10.00(W), 11.00(W), 15.25, 23.05 – **Wrp:** 15.35, 23.01, 23.30 – **T.S:** 15.00, 16.00, 18.30, 20.00.

ANN: "Ici Saint Pierre et Miquelon office de Radiodiff. Télévision Française" – **INT-SIG:** The first movements of "3 Piéces" by J. Ibert (to be changed) – **V.** by letter. Records accepted.

UNITED STATES OF AMERICA

L.T: See World Time Map and Table – **Pr.L:** English.

VOICE OF AMERICA (Go.)

"THE VOICE OF AMERICA" is operated by the Broadcasting Service of the United States Information Agency. The VOA seeks to promote an increased understanding of the United States among the peoples of the world and to strengthen cooperative international relations.

ADDR: Voice of America, U.S. Information Agency, 330 Independence Av, S.W. Washington 25, D.C. – **L.P:** Dir. US Information Agency: Carl T. Rowan. Dir. Broadc. Sce: Henry Loomis. Prgr. Mgr: Alexander A. Klieforth. Engineering Mgr: Edgar Martin. Dir. TV Sce: Alan Carter.

STATIONS: Call-letters not used.

Delano	(50/100/200kW): Delano, California.
Dixon	(50/100/200kW): Dixon, California.
Bound Brook	(50kW): Bound Brook, New Jersey.
Bethany	(110kW): Bethany, Ohio.
Greenville	(50/250/500kW): Greenville, No. Carolina.
Honolulu	Hawaii (100kW).
Marathon	Florida (50kW – 1180kc).
Sugarloaf	Florida (50kW – 1040kc).

East Coast Stations:
Unmarked = Greenville, * = Bethany, ** = Bound Brook.

kc	m	kc	m	kc	m	kc	m
5965	50.20	9625	31.17	11870	25.27	15395	19.49
5975	50.21	9635	31.14	11890	25.23	15400	19.48
5995	50.04	9640	31.12	11920	25.17	15410	19.47
6030	49.75	*9650	31.09	11950	25.10	15415	19.46
6055	49.55	9670	31.02	11960	25.08	17710	16.94
*6065	49.46	9710	30.90	15150	19.80	17740	16.91
6125	48.98	*9720	30.86	15205	19.73	17780	16.87
*6190	48.47	9725	30.85	15215	19.71	17800	16.85
9520	31.51	9765	30.72	**15225	19.70	17830	16.83
9525	31.50	9770	30.71	15235	19.69	17875	16.79
*9530	31.48	11710	25.62	15250	19.67	*21485	13.96
9540	31.45	*11770	25.49	15280	19.63	21600	13.89
9565	31.36	11825	25.37	15325	19.58	*21610	13.88
9590	31.28	11830	25.36	15330	19.57		

West Coast Stations: Unmarked = Delano, * = Dixon.

kc	m	kc	m	kc	m	kc	m
5965	50.20	*9545	31.43	11790	25.45	15410	19.47
*5985	50.13	*9665	31.04	*11845	25.33	*17735	16.92
*6085	49.30	9700	30.93	*15185	19.76	17765	16.89
6095	49.22	9735	30.82	*15290	19.62	17820	16.84
*6145	48.82	11705	25.63	*15325	19.58	*17850	16.81
6185	48.50	*11715	25.61	15365	19.52	*21650	13.86
9520	31.51	*11730	25.58				

Honolulu:

kc	m	kc	m	kc	m	kc	m
5975	50.21	9650	31.09	11850	25.32	15135	19.82
6125	48.98						

RELAY STATIONS:
For frequencies of the relay stations, refer to the individual countries: Germany, Greece, Great Britain, Morocco, Ceylon, Ryukyu Islands, Philippines, Liberia.

ANNOUNCEMENT:
Each program ends with these words spoken in English: "This program has come to you from the United States of America". The station identification is then announced in English.

INTERVAL SIGNAL:
Choir of brass playing a 10 note version of "Columbia, the Gem of the Ocean". This musical symbol is played at the beginning of a transmission, during station breaks, and at the conclusion of a transmission. At the beginning of a transmission the sign on announcements is followed by 3 minutes of musical symbol made up of alternate 5 seconds music and 5 seconds silence.

VERIFICATION by QSL-card. No return postage required.

To Europe

	U.S. m.b.	Relay stations m.b.
ALBANIAN		
20.00–20.30	19, 25, 31	31, 41, 49, 379
22.00–22.30	19, 25, 31	41, 49
ARMENIAN		
14.30–15.00	16, 19	16, 19, 25, 31
16.00–16.30	16, 19	16, 19, 25, 31
BULGARIAN		
04.15–04.30	31, 49	41, 49
17.30–18.00	16, 19	41, 49, 379
19.30–20.00	19, 25, 31	31, 41, 49, 379
CZECH-SLOVAK		
04.45–05.00	31, 49	41, 49, 251
05.45–06.00	31, 49	41, 49
20.00–20.30	16, 19, 25	41, 49, 251
22.00–22.30	16, 19, 25	41, 49
22.00–22.30	16, 19, 25	41, 49
ESTONIAN		
03.15–03.30	31, 49	41, 49
18.00–18.30	16, 19, 25	41, 49
20.30–21.00	19, 25, 31	41, 49
GEORGIAN		
14.00–14.30	16, 19	16, 19, 25, 31
15.00–15.30	16, 19	16, 19, 25, 31
GREEK		
17.00–17.15	16, 19	31, 41, 49, 238
17.15–17.30	16, 19	31, 41, 49, 238, 379

HUNGARIAN	U.S. m.b.	Relay stations m.b.
05.15–05.30	31, 49	41, 49
06.15–06.30	31, 49	41, 49
18.30–19.00	16, 19	19, 25, 31, 379
21.30–22.00	16, 19	31, 41, 49
22.30–23.00	19, 25	25, 31, 41, 49, 379
LATVIAN		
03.00–03.15	31, 49	31, 41, 49
17.30–18.00	16, 19	25, 31, 41, 49
19.00–19.30	16, 19	25, 31, 49
LITHUANIAN		
03.30–04.00	—	41, 49
17.00–17.30	16, 19	19, 25, 31, 41, 49
18.30–19.00	16, 19	25, 31, 41, 49
POLISH		
05.00–05.15	31, 49	25, 31, 41, 49
06.00–06.15	31, 49	25, 31, 41, 49
16.30–17.00	16, 19	19, 25, 31, 41, 49
19.30–20.00	16, 19	25, 41, 49, 251
21.30–22.00	16, 19	25, 31, 49, 251
RUMANIAN		
04.00–04.15	31, 49	25, 31, 41, 49
18.00–18.30	19, 25	31, 41, 49
*18.30–19.00	—	379
20.30–21.00	19, 25, 31	31, 41, 49, 379
RUSSIAN		
03.00–04.00	31, 49	41, 49, 251
04.00–05.00	31, 49	41, 49
15.00–18.00	16, 19	25, 31, 41, 49
18.00–21.00	19, 25	31, 41, 49
SERBO-CROAT		
04.30–04.45	31, 49	41, 49, 251
05.30–05.45	31, 49	41, 49
19.00–19.30	19, 25	31, 41, 49, 251, 379
21.00–21.15	19, 25, 31	31, 41, 49, 251, 379
SLOVENE		
17.00–17.15	16, 19	41, 49
21.15–21.30	19, 25, 31	31, 41, 49, 251
UKRANIAN		
15.30–16.00	16, 19	19, 25, 31

To Africa

ARABIC		
17.30–18.00	13, 16, 19	19, 25, 41, 49
19.00–19.30	13, 16, 19	19, 25, 41, 49
FRENCH		
17.00–17.30	13, 16, 19	19, 49
19.30–20.00	13, 19, 25	25, 49
21.30–22.00	19, 25	19, 25, 31, 41, 75
HAUSA		
16.30–17.00	16, 19	—
HINDI		
18.30–19.00	—	19, 25
SWAHILI		
15.30–16.00	13, 16, 19	16, 19
18.30–19.00	13, 16, 19	19, 25

To Near- and Middle East

ARABIC		
04.00–06.00		41, 49, 238
17.30–21.30		41, 49, 238
TURKISH		
16.30–17.00	16, 19	31, 41, 49, 238
17.30–18.00		31

To South Asia

BENGALI		
13.30–14.00*		16, 19, 25
14.30–15.00**		16, 19, 25
HINDI		
15.30–16.00		16, 19, 25, 41
TAMIL		
14.00–14.30		16, 41
URDU		
15.00–15.30		16, 25
16.00–16.30		19, 25

* to India: ** to Pakistan.

To Far East

BURMESE	U.S. m.b.	Relay stations m.b.
00.30–01.30	16, 19	13, 16, 19, 25
09.00–09.30	31, 49	—
12.00–12.30	—	19, 25, 31
12.30–13.00	31, 49	19, 25, 31
14.30–15.30	—	25, 31, 41
CAMBODIAN		
13.30–14.00	31, 49	25, 31, 41, 263
23.30–24.00	16, 19	25, 41, 49
INDONESIAN		
11.00–12.00	31, 49	19, 25
14.30–15.30	—	25, 31, 41
KOREAN		
11.30–12.00	31, 49	49
21.30–22.30	16, 19, 25	41, 49, 75
22.30–23.00	—	41, 49, 75
LAOTIAN		
13.00–13.30	25, 31, 49	25, 31, 263
00.00–00.30	16, 19	25, 31
MANDARIN		
10.00–11.00	31, 49	19, 25, 31, 41, 49, 255
11.00–11.30	—	25, 31, 41, 49, 255
11.30–12.00	—	25, 31, 41, 49, 255, 263
12.00–12.30	31, 49	31, 41, 49, 255
12.30–13.30	—	31, 41, 49, 255
13.30–14.00	31, 49	31, 41, 49, 255
14.00–14.30	—	31, 41, 49, 255
14.30–15.00	31, 49	31, 41, 49, 255, 263
*15.00–15.30	—	31, 41, 49, 255
15.30–16.00	31, 49	31, 41, 49, 255
22.30–23.00	16, 19	25, 31, 41, 49, 326
*23.30–00.00	—	19, 25, 31, 49
*00.30–01.00	—	16, 19, 25, 49
RUSSIAN		
09.00–09.30	31, 49	41, 49
09.30–10.00	—	41, 49
12.30–13.00	—	41, 49
THAI		
14.00–14.30	31, 49	25, 31, 41, 263
23.30–24.00	16, 19	31, 41
VIETNAMESE		
11.00–11.30	31, 49	25, 31, 41
11.30–12.00	—	25, 31, 41
12.00–12.30	—	25, 31, 41, 263
12.30–13.00	31, 49	25, 31, 41, 263
13.00–14.30	—	31, 41, 49
14.30–15.00	31, 49	31, 41, 49
15.00–16.00	31, 49	31, 41, 49, 263
16.00–16.30	—	31, 41
22.30–23.00	16, 19	31, 41, 49

To Latin America

SPANISH	U.S (kc)
11.00–14.00	1040, 1180, 6190, 9525, 11890, 15235
22.30–23.00	1040, 1180, 6190, 9530, 15215
23.00–02.00	1040, 1180, 5975, 6190, 9670, 9725, 11960, 15400
02.00–04.30	1040, 1180, 5975, 6190, 9530, 9670, 9725, 9735 11730, 11960
PORTUGUESE	**U.S. (kc)**
21.30–22.00	9565, 11830, 15325 (Mon-Fri only)
22.00–01.00	9565, 11830, 15325 (daily)

Programs in English

TO EUROPE	U.S. kc	Relay Stations (kc)
03.00–05.00	5995, 9635	3980 M, 6080 T 7200, 9740 B, 1196 M (04.00–04.30)
05.00–07.30	5995, 9635	1196, 3980, 6040 M, 6080, 11790 T, 7200, 9740 B
07.30–07.45(Sun)	5995, 9635	6040 M, 6080, 11790 T, 7200, 9740 B
14.00–15.00	15205, 17780	3980 M, 15290 T
15.00–16.00	15205, 17780	3980 M, 15290 T, 7205 TH
16.00–17.00	15205, 17780	3980 M, 7205 TH, 5995 T
17.00–18.30	15205, 17780	1196, 3980 M, 5995 T, 7205 TH
18.30–22.15	9670, 11825, 15205	3980 M, 5995, 9740 T, 7205 TH
22.15–22.45	—	5995, 9740 T, 7205 TH
22.15–23.45	—	1196, 3980 M

TO EAST AFRICA	US kc	Relay stations (kc)
03.00–05.30	—	6075, 7195, 7265 L
05.30–06.00	—	7195, 7265 L
06.00–07.30	—	17735 M
14.00–17.00	—	15270, 15360, 17870 L
17.00–19.30	—	15270 L
19.30–21.30	—	11910, 15270 L
TO SOUTH AFRICA		
03.00–05.30	—	7195 L
06.00–07.30	—	17775 L
TO WEST & CENTRAL AFRICA		
03.00–04.30	5995, 9635	6075, 7195, 7265 L
04.30–06.00	5995, 9635	6035, 6075, 7195, 7265 L
06.00–07.00	5995, 9635	6035, 6075, 7195, 7265 L, 11925 B
07.00–07.30	5995, 9635	6035, 6075, 7195 L, 11925 B
14.00–15.00	15410, 17710	15270, 15360 L
15.00–17.00	15410, 17710	3965, 6035, 15270, 15360 L
17.00–18.00	15410, 17710	3965, 15270, 15445 L
18.00–19.00	15415, 17710	3965, 6035, 7195, 11910, 15270 L
19.00–21.30	11770, 15415	3965, 6035, 7195, 11910, 15270, 15360 L
21.30–22.15	11770, 15415	3965, 6035, 7195, 11910, 15360 L
22.15–23.45	—	3965, 6035, 7195, 11910 L
TO MIDDLE EAST		
03.00–06.00	—	7200, 9740 B, 9545 M, 6080, 9615 T
06.00–07.30	—	1259, 6015, 7130 R, 9740 B 9545, 9615 M
07.30–07.45(Sun)—		6080 T, 9545 M
14.00–15.00	—	15290, 17855 T, 15190 M, 6015, 7130 R
15.00–16.00	—	15290 T, 7205 TH, 6015, 6015, 7130 R
16.00–16.30	—	15290 T, 1259, 6015, 7130 R 9760 M
16.30–17.00	—	7205 TH, 15290 T
17.00–18.00	—	9760 M, 7205 TH, 5995, 9615, 11960 T
18.00–22.15	—	9760 M, 7205 TH, 5995 T
TO SOUTH ASIA		
01.00–03.30	—	7275, 11835 C
12.00–13.30	—	7110, 11835, 15415 C
13.30–14.00	—	7110 C
14.00–15.00	—	15415 C
15.00–15.30	—	7110, 15415 C
16.00–16.30	—	7110 C
TO EAST ASIA		
09.00–11.15	6145, 9520	6125 H, 9605 P, 7155OK
11.15–12.00	—	6125 H, 9605 P, 5975, 7155 OK
12.00–12.30	6145, 9520	6125 H, 7155 OK
12.30–13.00	—	6125 H, 7275 P, 7155 OK
13.00–16.00	6145, 9520	6125 H, 7275 P, 7155 OK
16.00–16.30	6145, 9520	6125 H, 7275 P, 1178, 7155 OK
21.00–21.30	—	7135, 6185, 9580 P, 3940, 6075, 7235 OK
22.00–22.30	15290, 17765	7135, 6110, 9580 P, 3940, 6075, 7235 OK
23.00–23.30	15290, 17765	6185, 9580 P, 6075 OK
00.00–00.30	17765, 15365;	6185, 9580 P, 11715, 15150 OK
01.00–01.30	17765, 15365	6185, 9580 P, 11715, 15150 OK
TO SOUTH EAST ASIA & *INDONESIA		
09.00–10.00	—	15315 P
11.00–16.00	—	9560 P
16.00–16.30	—	1140, *6160, 9560 P
22.00–22.30	—	6065, 7175, 7225 P
23.00–23.30	—	6065, 7225 P
00.00–00.30	—	11805, 15185, 17830 P
01.00–01.30	—	15165, 15250, 17735 P
TO OCEANIA		
09.00–12.30	5985, 9665	9650 H
TO LATIN AMERICA	**U.S. kc**	
23.00–03.30	6030, 9565(from 01.00), 9640(to 01.00) 9650, 11770, 11830(from 01.00), 11890, 15400(to 01.00)	

Transmitter Abbreviations: G=Greenville, No. Carolina, R=Rhodes, B=BBC, London, C=Colombo, H=Honolulu, L=Liberia, M=Munich, OK=Okinawa, P=Philippines (Malos & Poro), T=Tangier, TH=Thessaloniki, MV=Monrovia, Liberia.
D=Delano, Be=Bethany.

N. in English, Portuguese, Spanish: on the h.
N. in French, Russian: at the beginning of prgr.

VOA Amateur Radio Program (English):
Sun 07.30–07.45: To Europe: 5995(G)/6080(T); to Europe/M. East: 6040/9545(M)/6080(T); to M. East: 1259/6015/7130(R)/9615(T); to Europe/No. & We. Africa: 9635(G); to Ea. Africa: 17735(M); to Far East: 9560/11830kc(D).
Sun 08.00–08.15: To We. Africa: 7195kc(L).
Sun 08.45–09.00: To No. Ea. Asia: 7155(O)/9605(P); to Ea. Asia: 6125(H); to So. Ea. Asia: 11930/15120/15315(P); to Australia/New Zealand: 9650kc(H).
Sun 22.45–23.00: To Europe: 5995/9740kc(T).
Mon 03.30–03.45: To Latin America: 6030/9565/11830(G), 9650/11770kc(Be).
VOA Spanish Amateur Prgr:
Sun 04.10–04.25: On 1040/1180kc to Caribbean, on 5975/9670/9725/11960(G), 6190/9530(Be), 9735kc(D) to Latin America.
Sun 12.45–13.00: On 1040/1180kc to Caribbean, on 6190/11890(Be), 9525/15235kc(G) to Latin America. This prgr. is rebroadcast at other times by a number of local radio st's in Latin America.

ARMED FORCES RADIO and TELEVISION SERVICE

ADDR: Hqs: Directorate of Armed Forces Information and Education, Washington D.C, 20305.
FI: By state (Dept. of Defense.)
This office exercises over-all policy control of the Armed Forces Radio and Television Service. The mission of AFRTS is to keep U.S. Service men and women stationed outside the States the best informed service personnel in the world on current events. **All broadcasts are in English.** News, sports and other timely matter is beamed overseas directly by ten powerful tr. on the U.S. Atlantic and Pacific coasts. These s.w. broadcasts serve the overseas radio stations, which rel. them locally. Prgrs. other than news and locally produced prgrs. are derived directly from the U.S. Commercial radio and tv. networks. N. is compiled from the wires of A.P. and U.P.I. and include voice actuality and "from the scene" report segments. Regular shortwave prgr's are presented daily from both Los Angeles and New York City, over the tr's of the V.O.A. The operational headquarters of AFRTS, at Los Angeles, ships undated radio and tv. prgrs. on transcription and film, respectively, to overseas stations, and controls the Pacific Shortwave Service.

PACIFIC SERVICE (from Los Angeles):
ADDR: AFRTS Shortwave 1016 No. McCadden Place, Los Angeles. Calif. 90038. **Te:** Hollywood 23301 – **L.P:** Officer-in-charge: Col Robert R. Eby, USAF.
D.PRGR'S: 21.30–16.30(Nov 64–February 65).

Call	kc	m	kW	Beam	h. of tr.
DL4	5965	50.29	100	Far East	04.00–16.30
DL2	6095	49.22	50	Caribbean	09.00–12.45
DL2	9700	30.93	50	Caribbean	01.30–08.45
DL3	9700	30.93	50	Far East	03.00–16.30
DL2	11705	25.63	50	Caribbean	13.00–15.00
DL5	11790	25.45	50	Caribbean	22.30–02.00
DL4	11790	25.45	100	Far East	02.00–04.00
Poro 1	15210	19.72	35	So. Ea. Asia	07.00–10.30
DL3	15410	19.40	50	Far East	21.30–02.30
DL2	17820	16.84	50	Far East	21.30–01.00

N: Hourly from 22.00–16.00 – **Conference Calls:** 22.30, 07.30, 14.30.
ANN: At the end of prgr: "This is the United States Armed Forces Radio and Television Sce". Hourly: "—broadc. on U.S. Government tr's at Delano, California" – **V.** by QSL-card (Freq's are announced 30 min's post each h).

EUROPEAN SERVICE (from New York).
ADDR: Armed Forces Press, Radio and Television Service, 250 West 57th Street, New York, New York 10019 – **L.P:** Officer-in-Charge: Colonel J. D. Hornsby, USAF.

Call	kc	m	kW	Beam	h of tr.
GB4	15280	19.63	250	Europe	14.30–18.00
GB4	11920	25.17	250	Europe	18.15–22.45
BB1	21650	13.86	50	N. Africa	14.30–18.00
BB1	15280	19.63	50	Europe	18.00–22.45
BB2	15225	19.70	50	Latin America	14.30–22.45
BB3	15225	19.70	50	N. Africa	14.30–19.00
BB3	11905	25.20	50	N. Africa	19.00–22.45

N: 15.00, 16.00, 17.00, 18.00, 19.00, 20.00, 21.00, 22.00.
"Conference Call": D 14.30, 22.30, Mon–Fri 17.45.
ANN: "This is the United States Armed Forces Radio and Television Service in New York City" – **V.** by QSL-card – **PUB:** Prgr. Sched. published quarterly, available on request.

A.F.R.T.S.s OUTLETS BROADCASTING

Abbreviations: A=Army – AFKN=American Forces Korea Network FEN=Far East Network – N=Navy – AF=Air Force – Fo=Fort – Cp=Cape.
The greater majority of the station operate from 06.00–24.00 L.T.

NORTH ATLANTIC

Location	Sce.	kc	W
Azores			
Lajes Fld			
Terceira	AF	1500	200
Greenland			
Sondrestrom	AF	1420	250
Thule	AF	1425	1kW
Iceland			
Keflavik	N	1484	250
Langanes	AF	1400	10
Labrador			
Saglek Bay	AF	1350	45
Newfoundland			
Argentia	N	1480	50
Stephenville	AF	1490	50
Alaska			
Adak	N	890	250
Bethel	AF	1490	10
Cape Newenham	AF	1450	10
Cape Lisburne	AF	1580	10
Cp. Prince of Wales	AF	1490	10
Cold Bay	AF	1490	50
Driftwood Bay	AF	1450	10
Fairbanks	AF	790	50
Fire Island	AF	1470	10
Fo. Greely	A	980	250
Fo.Richardson	A	1360	50
Fo.Wainwright	A	1360	50
Fo.Yukon	AF	1520	10
Galena	AF	570	250
Indian			
Mountain	AF	1240	10
King Salmon	AF	790	250
Kodiak	N	960	250
Kotzebue	AF	1340	10
Murphy Dome		1570	10
Nome	AF	590	400
Northeast Cape	AF	1450	10
Port Heiden	AF	1340	10
Port Moller	AF	800	10
Shenya	AF	1240	10
Takotna	AF	1540	10
Unalakleet	AF	1400	10
Wildwood	AF	1530	10
CARIBBEAN AREA			
Ascension Isl.	AF	1600	250
Trinidad	N	1550	1kW
Cuba			
Guantanamo Bay	N	1340	1kW
Panama			
Fo.Clayton	A	790	5kW
Fo.Davis	A	790	5kW
Puerto Rico			
Fo.Allen	A	1470	50
Fo.Frooke	A	1470	50
Ramey	AF	780	50
Roosevelt Roads	Sce. N	kc 1200	W 50
MIDDLE EAST AREA			
Asmara			
Eritrea	A	1480	100
Teheran, Iran	A	630	250
Turkey			
Adana	AF	1594	10
Cigli	AF	1570	4
Karamursel	AF	1570	25
Diyarbarkir	AF	1570	6
Samsun	AF	1520	10
Trabzon	AF	1580	10
SAUDI ARABIA			
Al Kharj		550	25
Dhahran		825	25
Jidda		600	25
Riyadh		800	25
NORTH AFRICAN AREA			
Libya			
Tripoli	AF	1594	1kW
Morocco			
Nouasseur	AF	1594	100
P. Lyautey	N	1484	250
Sidi Slimane	AF	1594	250
EUROPEAN AREA			
Germany (see Germany)			
Greece			
Athens	AF	1594	1kW
Iraklion,Crete	AF	1570	250
Spain (see Spain)			
Italy			
Leghorn	AF	540	5
Verona	AF	540	5
Vicenza	AF	540	5
FAR EAST AREA			
Japan (FEN) (see Japan)			
Okinawa	AF	650	10kW
Philippine Islands			
CampJohnHay	AF	1300	250
Clark AFB	AF	1520	1kW
Sangley Point;	N	1220	250
Subic Bay	N	1300	250
Taiwan			
Tainan	AF	1580	250
Taipei	N	1560	5kW
	N	7215	1kW
Republic of Korea (AFKN)			
see Korea			
Vietnam			
Saigon	A	1360	600
PACIFIC AREA			
Guam			
Finegayan	N	1550	50
Andersen	AF	1090	250
JohnstonIsland	AF	1250	100
Marshall Islands			
Eniwetok	N	1385	250
Kwajalein	N	1220	1kW
MidwayIsland	N	900	250

Proposed new outlets: Brindisi(Italy), Cakmaklik, Corlu, Erzurum, Izmit(Turkey) 1000kc, Taif (Saudi Arabia) 850kc.

PRIVATE STATIONS

GOVERNMENT AGENCY:

THE FEDERAL COMMUNICATIONS COMMISSION (FCC) the licensing agency for broadc. st's.

Addr: P.O. Dept. Bldg, Washington 20554, D.C – L.P (key officials): Chmn: E. W. Henry. Executive Dir. C. B. Plummer. Secr: B. F. Waple, Chief, Broadcast Bureau: J. B. Sheridan, Chief, Reports & Information: G. O. Gillingham.

The FCC is an independent Federal agency, composed of seven Commissioners appointed by the Pres. by and with the advice and consent of the Senate. One of its major activities is the general regulation of broadc. – *now visual as well as aural. This regulation may be divided* into three phases: 1) The allocation of spectrum space to the different types of broadcast services, 2) Considerations to build and operate individual stations, 3) Regulating their operation.

Call letters. – International agreement provides for the national identification of the radio st. by the first letter or first two letters of its assigned call signal, and for this purpose apportions the alphabet among different nations. USA st's use the initial letters K, N, and W, exclusively, and part of the A series. Broadcast st's are assigned call letters beginning with K or W. Generally speaking, those beginning with K are assigned to st's west of the Mississippi River and in the territories and possessions, while W is assigned to broadcast st's east of the Mississippi.

Number of Broadc. St's in the USA as of July 1st, 1964:	Authorized	Operating
AM comm.	4061	3976
FM comm.	1371	1181
FM educ.	257	243
TV comm.	669	583
TV educ.	257	80

In addition, 1913 translator pick up and rebroadcast TV programs of regular TV stations.

EDUCATIONAL

Department of Health, Education, and Welfare, Office of Education, Washington D.C. 20202; Office of the Under Secretary: I. A. Nestingen.

The Educational Television Facilities Programme designed to encourage establishment of new and improved broadcast facilities through financial grants based on matching funds.

Office of Education, Media Research and Dissemination Branch, Ag. *Dir: Th. D. Clemens. Educ. Media Specialist: Mrs. G. Broderick.* Provides a variety of services by professional staff specialists to schools and college officals, st. operators, and others, as requested. Under Title VII of the National Defense Education Act, finances research and experimentation in the educ. uses of all media; disseminates information on the subject through conferences, seminars, workshops, and publication of pertinent bulletins.

Organisations:

National Association of Educational Broadcasters (NAEB). *Headquarters: 1346 Connecticut Ave, N.W. Washington D.C. 20036.* **Te:** 667-6000 – **Publications and Network Office:** 119 Gregory Hall, Urbana, Illinois 61803. **Te:** 333-0580.

L.P: Pres: W. G. Harley, Vice-Pres: H. E. Hill. Ag. Pres. (TV): C. Scott Fletcher. Vice Pres. (TV): G. L. Appy.

STATIONS: 196 educational institutions and organizations owning and operating a total of 222 educational radio and TV stations. **FI:** By membership fees. Also some support from outside sources for special research projects. The national independent professional asso*ciation, which since 1925 has represented the interests and needs of* educ. television and radio broadcasters, represents appr. 75% of the educ. st's and production centers of the United States (appr. 90% exc. those identified as religious st.).

Activities and Functions: The NAEB is the Association of American institutions operating educational, cultural and public Sce's radio and TV st's and production centers. Publish a monthly Newsletter, a semi-monthly Washington Report, and a bi-monthly Journal. The NAEB also operates a radio network which duplicates via tape and distributes to members st's five hours of programming per week. At present there are some 150 st's in this network. Exchanges of prgr's with other nations are welcomed. It also actively cooperates with various intern. organizations (European Broadcasting Union, UNESCO etc.), and the national systems of various other countries. *According to FCC regulations, non-comm. educational FM st's have* no restrictions on transmission time.

National Educational Television Center, Coliseum Building, 10 Columbus Circle, New York 19, New York.

Provides a prgr. sce. to affiliated educ. t.v. st's throughout the USA. Major support for the 10 years of existence has come from the Ford Foundation.

Radio – By action of the FCC, 20 channels are reserved in the FM radio band for non-commercial educ. use. More than 200 st's are *operating in this reserved band. In addition, some 30 st's which began* on AM operating in the early days of radio are still in operation. Some of them have dual outlets in the FM band. These st's provide both in-school and out-of-school prgr's to the communities in which they operate.

Television – In April, 1962, the FCC announced the reservation of approx. 12% of available t.v. channels for non-comm. educ. use. Reserved channels presently total 350 in the VHF and UHF bands, of which 80 are presently on the air. The st's are licensed to State Departments of Education, to city school systems and to individual universities, or to community corporations which embrace entire school and cultural organizations within a community.

COMMERCIAL STATIONS

NATIONAL ASSOCIATION OF BROADCASTERS

ADDR: 1771 N. Street N. W. Washington, D.C. 20036 – **Te:** Decatur 2-9300.

Purpose: The purpose of the Association is to foster and promote the development of the arts of aural and visual broadc. in all its forms; to protect its members in every lawful and proper manner from injustices; to do all things necessary and proper to encourage customs and practices which will strengthen and maintain the broadc. industry to the end that it may best serve the public.

L.P: Chmn: W. Schroeder. Sec-Treasurer: E. E. Revercomb.

Members as of Oct. 1, 1964, AM Radio 2082 – FM Radio 792 – TV stations 445 – Radio Networks 4 – Television Networks 3. Associate Members 154.

M.W. Stations operating with a power of 10 kW and above.

The time each station is authorized to operate is indicated in the list. Each station is required to operate at least two-thirds of the hours it is authorized to operate between 6:00 AM and 6:00 PM, and two-thirds of hours it is authorized to operate between 6:00 PM and midnight. If authorized to operate unlimited time, it may operate for the entire 24 h.

Abbreviations: Ala. Alabama, Alsk. Alaska, Ariz. Arizona, Ark. Arkansas, Calif. California, Colo. Colorado, Conn. Connecticut, D.C. District of Colombia, Fla. Florida, Ga. Georgia, Haw. Hawaii, Ill. Illinois, Ind. Indiana, Kans. Kansas, Ky. Kentucky, La. Louisiana, Mass. Massachusetts, Md. Maryland, Mich. Michigan, Minn. Minnesota, Miss. Mississippi, Mo. Missouri, N.C. North Carolina, Nebr. Nebraska, N. Mex. New Mexico, N.Y. New York, Okla. Oklahoma, Oreg. Oregon, Pa. Pennsylvania, R.I. Rhode Island, S.C. South Carolina, S.Dak. South Dakota, Tenn. Tennessee, Tex. Texas, Va. Virginia, Wash. Washington, W.Va. West Virginia. Wis. Wisconsin.

Call	kW	
540		
WGTO	50	Cypress Gardens, Fla.
640		
KFI	50	Los Angeles, Calif.
650		
KORL	10	Honolulu, Haw.
WSM	50	Nashville, Tenn.
660		
KFAR	10	Fairbanks, Alsk.
WNBC	50	New York
WESC	10	Greenville, S.C.
670		
WMAQ	50	Chicago, Ill.
680		
KNBR	50	San Francisco, Calif.
WCBM	10	Baltimore, Md.
WNAC	50	Boston, Mass.
WPTF	50	Raleigh, N. C.
WMPS	10	Memphis, Tenn.
KBAT	50	San Antonio, Tex.
WCAW	10	Charleston, W.Va.
690		
WVOK	50	Birmingham, Ala.
WAPE	50	Jacksonville, Fla.
KULA	10	Honolulu, Haw.
KGGF	10	Coffeyville, Kans.
KHEY	10	El Paso, Tex.
WCYB	10	Bristol, Va.
700		
WLW	50	Cincinnati, Ohio
710		
KMPC	50	Los Angeles, Calif.
WGBS	50	Miami, Fla.
KEEL	50	Shreveport, La.
WHB	10	Kansas City, Mo.
WOR	50	New York
KGNC	10	Amarillo, Tex.
KIRO	50	Seattle, Wash.
720		
WGN	50	Chicago, Ill.
730		
KFQD	10	Anchorage, Alsk.
740		
WBAM	50	Montgomery, Ala.
KGLM	10	Los Angeles, Calif.
KCBS	50	S. Francisco, Calif.
WPAQ	10	Mt. Airy, N.C.
KRMG	50	Tulsa, Okla.
KTRH	50	Houston, Tex.
750		
WSB	50	Atlanta, Ga.
KMMJ	10	Grand Island, Nebr.
KXL	50	Portland, Oreg.
760		
KGU	10	Honolulu, Haw.
WJR	50	Detroit, Mich.
770		
KOB	50	Albuquerque, N. Mex.
WABC	50	New York
780		
WBBM	50	Chicago, Ill.
810		
KGO	50	S. Francisco, Calif.
KCMO	50	Kansas City, Mo.
WGY	50	Schenectady, N.Y.
820		
WFAA	50	Dallas, Tex.
WBAP	50	Fort Worth, Tex.
830		
WCCO	50	Minneapolis – St. Paul, Minn.
840		
WHAS	50	Louisville, Ky.
850		
WYDE	10	Birmingham, Ala.
KOA	50	Denver, Colo.
WHDH	50	Boston, Mass.
WKIX	10	Raleigh, N.C.
WJW	10	Cleveland, Ohio
WJAC	10	Johnstown, Pa.
860		
KTRB	10	Modesto, Calif.
KOAM	10	Pittsburg, Kans.
WOAY	10	Oak Hill, W. Va.
870		
WWL	50	New Orleans, La.
880		
WCBS	50	New York
890		
WLS	50	Chicago, Ill.
900		
KFRB	10	Fairbanks, Alsk.
940		
KFRE	50	Fresno, Calif.
WINZ	50	Miami, Fla.
WMAZ	50	Macon, Ga.
KAHU	10	Waipahu, Haw.
KIOA	10	Des Moines, Iowa
WYLD	10	New Orleans, La.
WFNC	10	Fayetteville, N.C.
990		
KTKT	10	Tucson, Ariz.
WHOO	10	Orlando, Fla.
WIBG	50	Philadelphia, Pa.
WLKW	50	Providence, R.I.
WNOX	10	Knoxville, Tenn.
KNIN	10	Wichita Falls, Tex.
1000		
WCFL	50	Chicago, Ill.
KOMO	50	Seattle, Wash.
1010		
KLRA	10	Little Rock, Ark.
KSAY	10	S. Francisco, Calif.
WINQ	50	Tampa, Fla.
WGUN	50	Decatur, Ga.
WMOX	10	Meridian, Miss.
KXEN	50	St. Louis, Mo.
KRVN	25	Lexington, Nebr.
WINS	50	New York
WFGW	10	Black Mountain, N.C.
KAWA	10	Waco, Tex.
1020		
KGBS	50	Los Angeles, Calif.
KDKA	50	Pittsburgh, Pa.
1030		
WBZ	50	Boston, Mass.
KCTA	50	Corpus Christi, Tex.
1040		
WHO	50	Des Moines, Iowa
1050		
WHN	50	New York
1060		
KPAY	10	Chico, Calif.
WNOE	50	New Orleans, La.
WRCV	50	Philadelphia, Pa.
1070		
WAPI	50	Birmingham, Ala.
KNX	50	Los Angeles, Calif.
WIBC	50	Indianapolis, Ind.
KFDI	10	Wichita, Kans.
WFLI	10	Chattanooga, Tenn.
WDIA	50	Memphis, Tenn.
WKOW	10	Madison, Wis.
1080		
KSCO	10	Santa Cruz, Calif.
WTIC	50	Hartford, Conn.
KWJJ	10	Portland, Oreg.
KRLD	50	Dallas, Tex.
1090		
KAAY	50	Little Rock, Ark.
WBAL	50	Baltimore, Md.
KING	50	Seattle, Wash.
1100		
KFAX	50	S. Francisco, Calif.
WHLI	10	Hempstead, N.Y.
KYW	50	Cleveland, Ohio
1110		
KRLA	50	Pasadena, Calif.
WALT	10	Tampa, Fla.
KFAB	50	Omaha, Nebr.
WBT	50	Charlotte, N.C.
1120		
KMOX	50	St. Louis, Mo.
1130		
KWKH	50	Shreveport, La.
WCAR	50	Detroit, Mich.
WDGY	50	Minneapolis, Minn.
WNEW	50	New York
1140		
KRAK	50	Sacramento, Calif.
WMIE	10	Miami, Fla.
KGEM	10	Boise, Idaho
KSOO	10	Sioux Falls, S.Dak.
WRVA	50	Richmond, Va.
1160		
WJJD	50	Chicago, Ill.
KSL	50	Salt Lake City, Utah
1170		
WCOV	10	Montgomery, Ala.
KCBQ	50	San Diego, Calif.
KVOO	50	Tulsa, Okla.
WWVA	50	Wheeling, W. Va.
1180		
WHAM	50	Rochester, N.Y.
1190		
WOWO	50	Ft. Wayne, Ind.
WANN	10	Annapolis, Md.
KEX	50	Portland, Oreg.
KLIF	50	Dallas, Tex.
1200		
WOAI	50	San Antonio, Tex.
1210		
WKNX	10	Saginaw, Mich.
WCAU	50	Philadelphia, Pa.
1220		
WGAR	50	Cleveland, Ohio
1500		
WTOP	50	Washington, D.C.
WJBK	10	Detroit, Mich.
KSTP	50	Minneapolis – St. Paul, Minn.
KPIR	10	Eugene, Oreg.
1510		
KALF	10	Mesa, Ariz.
WLAC	50	Nashville, Tenn.
KGA	50	Spokane, Wash.
WAUK	10	Waukesha Wis.
1520		
KACY	10	Port Hueneme, Calif.
WKBW	50	Buffalo, N.Y.
WFYI	10	Mineola, N.Y.
KOMA	50	Oklahoma City, Okla.
KGON	10	Oregon City, Oreg.
1530		
KFBK	50	Sacramento, Calif.
WCKY	50	Cincinnati, Ohio
KGBT	50	Harlingen, Tex.
1540		
KPOL	50	Los Angeles, Calif.
KXEL	50	Waterloo, Iowa
WPTR	50	Albany, N.Y.
WJMJ	50	Philadelphia, Pa.
KCUL	50	Fort Worth, Tex.
1550		
KFIF	50	Tucson, Ariz.
KKHI	10	S. Francisco, Calif.
KDAB	10	Arvada, Colo.
WYOU	10	Tampa, Fla.
WSMA	10	Smyrna, Ga.
KOKA	10	Shreveport, La.
WBSC	10	Bennettsville, S.C.
1560		
KPMC	10	Bakersfield, Calif.
WQXR	50	New York
WLVN	10	Nashville, Tenn.
1580		
KYND	50	Tempe, Ariz.
KDAY	50	Santa Monica, Calif.
WWIL	10	Ft. Lauderdale, Fla.
WAXU	10	Lexington, Ky.
WPGC	10	Morningside, Md.
WPAC	10	Patchogue, N.Y.

INTERNATIONAL BROADCAST STATION KGEI

FI: By donations, non-profit, non-comm. org's. KGEI (the Voice of Friendship) is owned and operaed by the Far East Broadc. Co. Inc, Whittier, California.

Even the Shotgun can miss . . .
A high-velocity advertizing blast in newspapers, national magazines, etc. can be devastating . . . but is it hitting the bull's-eye? Getting to your potential customers at the moment when they are ready to buy? There is one sure way to do that. The World Radio TV Handbook . . . People within your line of business just naturally look to the WRTH, when they are ready to buy . . . What a time to tie in with your big-blast advertising . . . — with selling ads in the World Radio TV Handbook . . . — the Bull's Eye . . .

ADDR: P.O. Box 15, San Francisco, Calif. **Te:** 591-4820. **Cable:** "Febcom-Sfran" – **L.P:** St. Mgr: C. W. Lawrence. Dir. Tec: J. L. Brooks. Dir. Prgr: S. P. Jeter.

STATIONS (d, Latin America) 50kW:
9590kc 31.28m – 11710kc 25.62m – 15240kc 19.69m

LATIN AMERICAN SCE: Mon–Fri 22.15–05.00, Sat 22.15–04.40, Sun 22.15–04.10 on 15240kc to (01.30), on 9590kc from (01.30).
N. in English/Spanish: Mon–Fri 22.30–22.45 – **English:** Mon–Fri 22.30–23.00, 04.47–04.53, Sat 23.30–24.00, 03.45–04.30, Sun 23.30–24.00, 03.30–04.00 – **Portuguese:** Mon–Fri 23.30–24.00, Sat/Sun 22.30–23.00 – **Russian:** D 23.00–23.30.

N. in Spanish: W 00.00, 01.00, 02.00(exc. Sat), 03.00, 03.30 – **L.L.** (English by Radio): Mon–Fri 00.05–00.30, 03.05–03.30.
NB: May–October 9590kc is replayed by 11710kc.

ANN: E (Sign on): "This is the Voice of Friendship, International broadc. st. KGEI, San Francisco, Calif, the United States of America, owned and operated by the Far East Broadc. Company on a freq. of ... KGEI is dedicated to the purpose of promoting good will, better understanding and friendship" – **INT-SIG:** Sign off with anthem "the Lords Prayer" followed by Nat. Anthem – V. by QSL-card (sent on request). Records accepted.

RADIO NEW YORK WORLDWIDE (WRUL)

Operated by International Educational Broadc. Corpo.
FI: By adv – **ADDR:** Worldwide Communication Center, 4 West 58th Str, New York City 19, N.Y. **Cable:** WRULINT-224302. **Te:** Plaza 2-3322 – **L.P:** Pres: R. Brent. Vice Pres. News and Operations: M. Krauss. Vice Pres. Adm: R. Grefe. Vice Pres. Business Development: M. Foster. Dir. Prgr. Development: M. Bernam. Dir. Research: M. Garcia. Dir. Eng. Language Section: J. Lowry. Dir. Latin American Operations: M. Bomar. Dir. Transmitter Engineering: L. MacDonald. Dir. Studio Engineering: J. Garafalo. English Broadcasters: J. Lowry, M. Bernam, H. Edell, O. Rose, A. Wasser, J. A. Zee, A. Benedict, K. Fitzpatrick, J. Money, M. Bartlett. Spanish Broadcasters: M. Bomar, T. Arriagada, M. Rosenberg, L. Uncal, A. Carvallo, J. Landajo and field correspondents in all Latin American Capitals.

FOREIGN SERVICE: Stations: 50/80kW.

kc	m	kc	m	kc	m	kc	m
6015	49.88	9620	31.19	11855	25.31	15440	19.43
6155	48.74	9640	31.12	11940	25.13	17760	16.89
9550	31.41	11840	25.34	15135	19.82		

To Europe (English): 1) to British Isles; 2) to Continental Europe; 3) to Scandinavia
12.00–16.00 on 15135[1]/15440[3]kc, 16.00–16.15 on 15440[3]kc, 16.15–17.30 on 11840[1]/15440[3]kc, 17.30–17.45 on 11840[1]kc, 17.45–20.00 on 9640[2]/11840[1]kc, 20.00–20.15 on 9640[2]kc, 20.15–21.40 on 9640[1], [3]kc.

To Africa (English): 12.00–20.00 on 17760kc, 20.15–21.40 on 11855kc.

To Caribbean & Latin America (English): 4) to No. We. So. America; 5) to Caribbean; 6) to No. Ea. So. America,
12.00–17.30 on 11940[5]/15440[4]kc, 17.30–20.15 on 15440[4]kc, 20.15–21.40 on 11940[5]/15440[4]kc, 21.40–22.00 on 11940[5]kc, 22.00–24.00 on 9550[6]/11940[5]kc.
N: ABC R. Network Late News at five minutes before the h. – **Special N:** "Chroniscope": Mon–Fri 12.55, 14.55, 16.55, 18.55, 20.55, 22.55, Sat 12.55, 16.55, 21.00, 23.00 – **Business N:** Mon–Fri "Worldwide Investors Digest": 21.20, 23.20 – Direct reports from the **New York Stock Exchange:** 15.20, 17.20, 19.20, 21.20 – **"Breakfast in New York":** Mon–Fri 12.00–14.55, Sun 12.30–13.30 – **Worldwide Hit Parade Prgr's:** Mon–Fri 16.00–16.55: Mon: The Album Scene, rep. Sat 12.00; Tues: Hit Parade Extra; Wed: Record Hits of Tomorrow, rep. Sat 14.00; Thurs: The Country & Western Scene, rep. Sat 16.00; Fri: Record Hits of Today, rep. Sat 15.00. All Mon–Fri 16.00 music features rep. at 22.00 Mon–Fri – **"This World We Live In":** Mon–Fri 17.30–18.55. First portion at 17.30 features "Request Time" is rep. at 23.30 – **"Mel in Manhattan":** Tues, Thurs 20.00, rep. Sat 13.30, 17.30, 23.30 – **"Postmark New York":** Sat 18.00 – **"DXing Worldwide":** Sat 19.00 – **"Great Moments in History":** Sat 22.00, Sun 18.00, Wed 20.00 – **"Sounds of New York":** 14.15, 20.30, Sun 15.00 – **"Voices in the Headlines":** Sun 21.00 – **Interview prgr's:** Mon–Thurs 19.15, Mon, Tues, Thurs 20.30 – **Rlg. prgr's:** Mon–Fri 15.40, 19.40 prgr's produced by the Mormon Church. **"Hour of Decision"** (with Billy Graham) Thurs 18.30, Sat 20.30, 22.30. **"Voice of Prophecy"** Sun 12.00, 19.00 – **Service from the Church of Jesus Christ of the Apostolic Faith:** Sun 17.00–18.00, Wed (to Africa only) 18.00–19.00. **"Scouting Worldwide"** Thurs 19.30 – **"Peace Corps Report":** Wed 19.30. World's Fair Programs will resume in April 1965 with the reopening of the 1964–65 New York World's Fair. Special WF QSL will again be issued with the resumption of the WF programs.

To Latin America in Spanish: 22.00–24.00 on 6155/11855kc, 00.00–00.15 on 6155/9550/11855kc, 00.15–01.00 on 6015/6155/9550/11855kc, 01.00–01.15 on 6015/6155/9550kc, 01.15–04.00 on 6015/6155/9550/9620kc.

N: Mon–Fri 22.30, 23.30, 24.00, 00.30, 01.15 & headlines 1 min. bef. the h. Sat 22.00, 23.00, 24.00, 01.00. Sun 22.00, 24.00, 01.00, 01.30. **"Radar":** (Re. by correspondents from all over the world, plus music, entertainment): Mon–Fri 22.00–24.00 – **"Prisma Continental":** (Hemispheric Newsreel of the Air) with direct re. from R. New York's own correspondents in all of Latin American countries): Mon–Fri 01.15 – **"Science and Life":** Mon 00.45, Sat 22.30 – **"Auto-Club of the air":** Tues 00.45, Sat 22.45 – **"Arts during the week":** Fri 00.45, Sat 23.30 – **"Reports from correspondents":** (by R. New York's own L.A. Correspondents all over the world) W 01.05, 03.10 – **"Voices of the fourth estate":** (Editorials from world's leading newspapers) W 01.10, 03.15 – **"New York Hit Parade":** Fri 01.35–03.20, Sat 00.35, Sun 01.05 – **"Mormon church":** (from Salt Lake City, Utah) Thurs 00.45, Sun 00.45, 03.30 – **"Christian science church":** Sun 00.15, 02.45 – **"Temple Time":** Sun 01.45 – **"Formula 3":** (preview for 00.15 to 04.00 broadc. time): Mon–Fri 24.00.
ANN: E: "This is R. New York Worldwide. You are tuned to WRUL, New York, broadc. to the world on the following frequencies..." – Sp: "Esta es R. Nueva York, WRUL, transmitiendo programas en español desde las cinco de la tarde, hora Standard de Nueva York". V. by QSL-card – Recorded reports (single track only) accepted – **PUB:** Write for Prgr-schedule to Program Guide, R. New York Worldwide, New York 19, N.Y. New guide to be published in May 1965.

WORLD INTER-NATIONAL BROADCASTERS (WINB), INC.

Comm. station which purpose is to promote the God of the Bible and Country – **ADDR:** P.O. Box 88, Red Lion, Penna. 17356.
STATIONS: WINB 50kW 11795kc 25.43m – 17720kc 16.93m.
D.Prgr. in English (to Mediterranean, So. Europe, Near East, No. Africa): 17.00–20.00 on 17720kc, 20.00–22.00 on 11795kc – **News:** 17.00, 20.05, 21.30 – **Music:** 19.30 – **Mr. & Mrs. Show:** 17.05.
V. by letter and prgr-schedule.

AMERICAN BROADCASTING CO.

(A Division of American Broadc. Paramount Theatres, Inc.).
ADDR: 7 West 66th Str, New York 23, N.Y. – **Te:** Susquehanna 7-5000.
L.P: Pres. American Broad.-Paramount Theatres and A.B.C.: L. H. Goldensen. Financial Vice-Pres. AB-PT and Executive Vice-Pres. A.B.C.: S. B. Siegel. Vice-Pres. in charge of Press Information for A.B.C.: M. J. Foster. Pres of the ABC Radio Network: R. R. Pauley.
Owned and operated stations: WABC+FM New York, **KABC+FM** Los Angeles, **KGO+FM** San Francisco, **WXYZ+FM** Detroit, **KQV** Pittsburgh, **WLS,** Chicago.

COLUMBIA BROADCASTING SYSTEM INC:

ADDR: 485 Madison Ave, New York 22, N.Y. **Te:** Plaza 1-2345 – **L.P:** Chmn. of the Board of Directors: William S. Paley. Pres: F. Stanton. Pres. CBS R. Div: A. H. Hayes.
Owned and operated stations: WCBS New York, **WBBM** Chicago, **KCBS** S. Francisco, **KMOX** St. Louis, **KNX** L. Angeles, **WEEI** Boston, **WCAU** Philadelphia – **V.** by QSL-card or letter.

NATIONAL BROADCASTING COMPANY INC:

ADDR: 30 Rockefeller Plaza, New York, N.Y. 10020.
L.P: Chmn. of the Board: R. W. Sarnoff. Pres: R. E. Kintner. Sen. Exec. Vice Pres: D. C. Adams. Exec. Vice Pres. NBC owned Stations & Spot Sales Div: R. E. Welpott. Exec. Vice Pres. TV Network: W. D. Scott. Exec. Vice Pres. R. Network: W. K. McDaniel. Vice Pres. Enterprises Div: G. A. Graham, Jr. Vice Pres. Corporate Affaires: R. Kasmire. Dir. Internat. Enterprises: J. M. Klein. **Radio Stations:** WNBC/WNBC-FM, 30 Rockefeller Plaza, New York 20, N.Y. **Te:** Circle 7-8300. Vice Pres, Gen. Mgr: T. Walworth – WRC/WRC-FM, 4001 Nebraska Ave, Washington 16. D.C. **Te:** Emerson 2-4000. Vice Pres, Gen. Mgr: J. Goodfellow – WJAS/WJAS-FM, 1459 Crane Ave, Pittsburgh 20, Pa. **Te:** Locust 3-5238, Gen. Mgr: S. J. Rooney – WMAQ/WMAQ-FM, Merchandise Mart, Chicago 54, Ill. **Te:** Superior 7-8300. Vice Pres, Gen. Mgr: L. E. Yoder – WRCV, 1619 Walnut Str. Philadelphia 3, Pa. **Te:** Locust 4-3700, Vice Pres, Gen. Mgr: R. W. Welpott – KNBR-AM-FM/KNBC/KNBC-FM, 420 Taylor, S. Francisco 2, Cal. **Te:** Greystone 4-8700. Vice Pres, Gen. Mgr: Th. C. McCray.

GEORGE P. ADAIR ENGINEERING COMPANY
CONSULTING ENGINEERS
Radio - Television - Communications - Electronics
DOMESTIC AND INTERNATIONAL
ENGINEERING
SERVICES
FEderal 3-1116
Cable: GAENGCO
901-20th STREET N.W.
WASHINGTON 6, D.C.

Short Wave listeners can hear a different sound when they tune to Radio New York Worldwide

Radio New York Worldwide is not an ordinary short wave station. It is different because it is privately owned and operated. It is the only daily advertising and public relations vehicle reaching more than 100,000,000 radio receivers in Europe, Africa and Latin America. It is different because the programs are more entertaining and more timely.

With on the spot live news reports coming to you from 55 correspondents in every area of the globe, with BILLBOARD selections of top music and records from around the world, and with business and stock price reports from the major financial centers . . .

You are better informed!

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RADIO NEW YORK WORLDWIDE

Worldwide Communications Center
4 West 58th Street
New York 19, N.Y., U.S.A.

FOR COMPLETE PROGRAM LISTING SEE OPPOSITE PAGE.

Some Exciting and Important Radio New York Worldwide programs

ENGLISH

Breakfast in New York: The excitement of New York at the start of a new day as reflected by its music and conversation. John Anthony Zee conducts this daily feature, beginning at 1200 GMT.

Chroniscope: A full 35-minutes of news and comment, including news by continent with special reports for Asia, Europe, Africa and the Americas; direct broadcasts from the New York Exchange, featuring latest financial news; sports and background to the news; presented six times daily.

The Worldwide Hit Parade: Radio New York Worldwide's most popular program, featuring five full hours of the hits of today and tomorrow in the pop field, jazz, and country music. Albums and singles will be featured at 1600 GMT, Monday through Friday, Saturday at 1200 GMT.

This World We Live In: With Hill Edell. The variety program with exciting conversation, music, and the popular feature "Listener's Request", beginning at 1730 GMT, Monday through Friday.

Special Programs: Radio New York Worldwide as a variety of exciting special programs every week, including interviews with famous people. Check your programs like "Report From New York", "Mel In Manhattan", "Book World", "Travel Worldwide", "Great Moments In History", and "Commerce Worldwide".

The Sounds of New York: Weekly review of the exciting sounds and people that make news and music in the great metropolis.

SPANISH

Prisma Continental: The nightly feature of late news, and direct reports, from spanish speaking correspondents around the world.

Radar: A daily variety program beginning at 2200 GMT, including interviews, comments, sports results, late news, and, most of all, the best in popular music.

Clave: A fast moving program of great variety, featuring a pot-pourri of the best of Radio New York Worldwide program features.

Always . . . in English or Spanish, complete coverage in depth of the major news and sports events of our time ... on Radio New York Worldwide. See complete station listing on page 206.

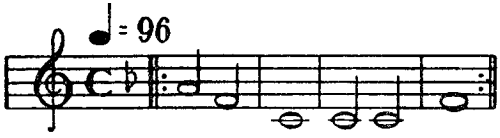
UNITED NATIONS

UNITED NATIONS RADIO

ADDR: United Nations, New York. **Cable**: Unations New York. **Te**: Plaza 4-1234. Telex 222422 –

L.P: Under-Secr. Office of Public Inf: Dr. Hernane Tavares de Sa. R & Visual Services Div: Dir: J. d'Arcy. Deputy Dir: D. Ritchie. Chief of Operations & TV: M. Hayward. Chief of Radio: P. Jankowski, Mgr. Technical Operations: J.C. Nichols.

INT-SIG: Music Chime.



ANN: "This is the "United Nations". This introductory phrase is used in all official UN prgrs. in all of the languages concerned Message to listeners: The R. & Visual services Division is anxious to establish contact with as many listeners as possible and will gladly acknowledge all communications. Upon request, new correspondents are sent a prgr. sched. and some general information about the United Nations and the Specialized Agencies. Correspondence and requests for copies of the schedule of UN broadcasts should be addressed to the Director of the nearest UN Information Centre. These are located in Accra, Addis Ababa, Algiers, Asuncion, Athens, Baghdad, Bangkok, Beirut, Belgrade, Bogota, Buenos Aires, Bujumbura, Cairo, Colombo, Copenhagen, Dakar, Dar Es Salaam, Djarkarta, Geneva, Kabul, Karachi, Kathmandu, Khartoum, La Paz, Leopoldville, Lima, Lome, London, Manila, Mexico City, Monrovia, Moscow, New Delhi, Paris, Port Moresby, Port-of-Spain, Prague, Rabat, Rangoon, Rio de Janeiro, Rome, San Salvador, Santiago, Sydney, Tananarive, Teheran, Tokyo, Tunis, Washington.

Request for copies of the sched. of UN broadc, which can be heard in the United States should be addressed to: Radio and Visual Services Division, United Nations, New York.

BROADCAST FROM THE UNITED NATIONS: B=Bethany; BB=Boundbrook; D=Delano; Di=Dixon; G=Greenville; H=Honolulu; M=Monrovia; P=Philippines; T=Tangier. I=We & C. Europe; II=So. Europe; III=We & Ce. Africa; IV=Ea. Latin America; V=Brazil; VI=We. Latin America; VII=C. & So. Africa; VIII=So. Europe, Mid East, No. Africa; IX=Ea. Africa; X=We. Africa; XI=Asia/Far East; XII=So. Ea. Asia.

Times	Areas	kc	N. or Prgr.
18.00–18.30*	I	9710(T), 15250/17800(G) 21485(B)	N: Arabic 18.00, English 18.10, French 18.15.
18.30–19.00*	II	9610(T), 11780/15150(BB) 15315(B)	N: Spanish(18.30) Italian (18.35), German (18.40), Greek (18.45), Turkish (18.50).
19.15–19.30*	III	15415(G), 21470(B)	N: French 19.15, English 19.22
00.30–01.00**	IV	9520/11870/15250(G)	Spanish(N.00.30)
01.00–01.15**	V	9565/11830/15325(G)	Portuguese (N)
01.45–02.00**	VI	11730(Di)	Spanish (N)
05.30–06.00**	VII	6125/9590(G)	N: French (05.30), English (05.45)
[1])06.30–07.00**	VIII	7250/15295(T)	N: English (06.30) Hebrew (06.35), Amharic (06.40), Italian (06.45), Serbo-Croat (06.50)
[2])06.45–07.00**	IX	15315/17860(M)	N: English (06.45) Swahili (06.55)
07.00–07.15**	X	6125/9590(G)	N: French (07.00) English (07.07)
[3])02.00–02.15**	XI	15250/17705(P)	English to Malaysia
[4])02.15–02.30**	XI	17735/21570(P)	Sinhalese to Ceylon
[5])07.30–07.45**	XI	6185/9520(D)	English to Au/NZ
[6])10.30–11.00**	XII	15155(P)	N: English (10.30) Thai (10.50)
[7])10.30–10.45**	XI	11785(P)	N. in Chinese
[8])10.45–11.00**	XI	11785(P)	N. in English (Tues Fri), N. in Indonesian (Sat)

*) Mon–Fri; **) Tues–Sat.

[1])tr. to (T) 02.30–03.00 on 6055/9645kc(G) – [2])tr. to (M) on 6125/9590kc(G) – [3])tr. to (P) at 01.30–01.45 on 15365kc(D) – [4])tr. to (P) 22.45–23.00 on 17735kc(Di) – [5])repeated from (H) 08.45–09.00 on 9650kc – [6])tr. to (P) 06.30–07.00 on 6185/9520kc (D) – [7])tr. to (P) 07.00–07.15 on 6185/9520kc(D) – [8])tr. to (P) 07.15–07.30 on 6185/9520kc(D).

BROADCAST OF MEETINGS OF THE GENERAL ASSEMBLY AND THE SECURITY COUNCIL WHEN IN SESSION

15.30–18.00 (AM Meeting) in **English/French** on 15150kc(G) to Europe/No. Africa; on 21520kc(B) to We. & Ce. Africa; in **Spanish** on 17730kc(B) to Latin America.

20.00–23.00 (PM Meeting) in **English/French** on 11780kc(G), 15150/15315kc(B) to Europe & No. Africa; on 15315kc(B) to We & Ce. Africa; in **Spanish** on 11890/17730kc(BB) to Latin America.

Prgr's from the United Nations are broadcast by st's in more than 100 countries and territories, The times of these broadcasts may be ascertained from local newspaper or from the stations concerned – R. st's in the US and Canada receive the prgr's direct by line from the Nations Headquarters or by recording – The R. and Visual Services Division prepares and distributes recorded prgr's in Amharic, Arabic, Duri, Dutch, English, French, German, Greek, Hebrew, Hindi, Indonesian, Italian, Persian, Polish, Portuguese, Pushtu, Russian, Serbo-Croat, Sinhalese, Spanish, Swahili, Tagalog, Thai, Turkish and Urdu.

Letters from Listeners are welcome.
New listeners are sent some general information about the United Nations upon request – Correspondence and request for particulars of the United Nations broadcasts from Headquarters should be addressed to: Radio and Visual Services Division, United Nations, New York.

CENTRAL AMERICA

BAHAMAS (British)

L.T: GMT–5 h (Su: GMT–4 h) – **Pr.L**: English.

BAHAMAS BROADCASTING AND TELEVISION COMMISSION (Go, Comm.)

FI: By adv – **ADDR**: P.O. Box 1347, Nassau. **Te**: 2-4623. **Cable**: "Broadcasts" – **L.P**: Mgr: R. Bethel. Dir. Tec: L. Cartwright. Dir. Prgr: L. Hanchell.

STATIONS: (System: Gates (ZNS1)):
ZNS1 1540kc 195m 10kW – ZNS2 1240kc 242m 0.25kW

HOME SCE. on 1540kc: 11.00(Sun 12.00)–05.00. **N**: 13.15, 18.15, 00.15 – On 1240kc: 22.30–04.00. **N**: 01.00.

ANN: "This is st. ZNS, Nassau". "This is ZNS2, The Voice of New Providence" – V. by letter. Records accepted.

BARBADOS (British)

L.T: GMT–4 h – **Pr.L**: English.

CARIBBEAN BROADCASTING CORPORATION

(Go, Comm.)
FI: By adv – **AD**: 12 min's per h.

ADDR: P.O. Box 795, Barbados WI. **Te**: 2163. **Cable**: Cabroco – **L.P**: Gen. Mgr: P. S. Watson. Dir. Tec: J. C. Luttrell. Prgr. Mgr: K. Foster.

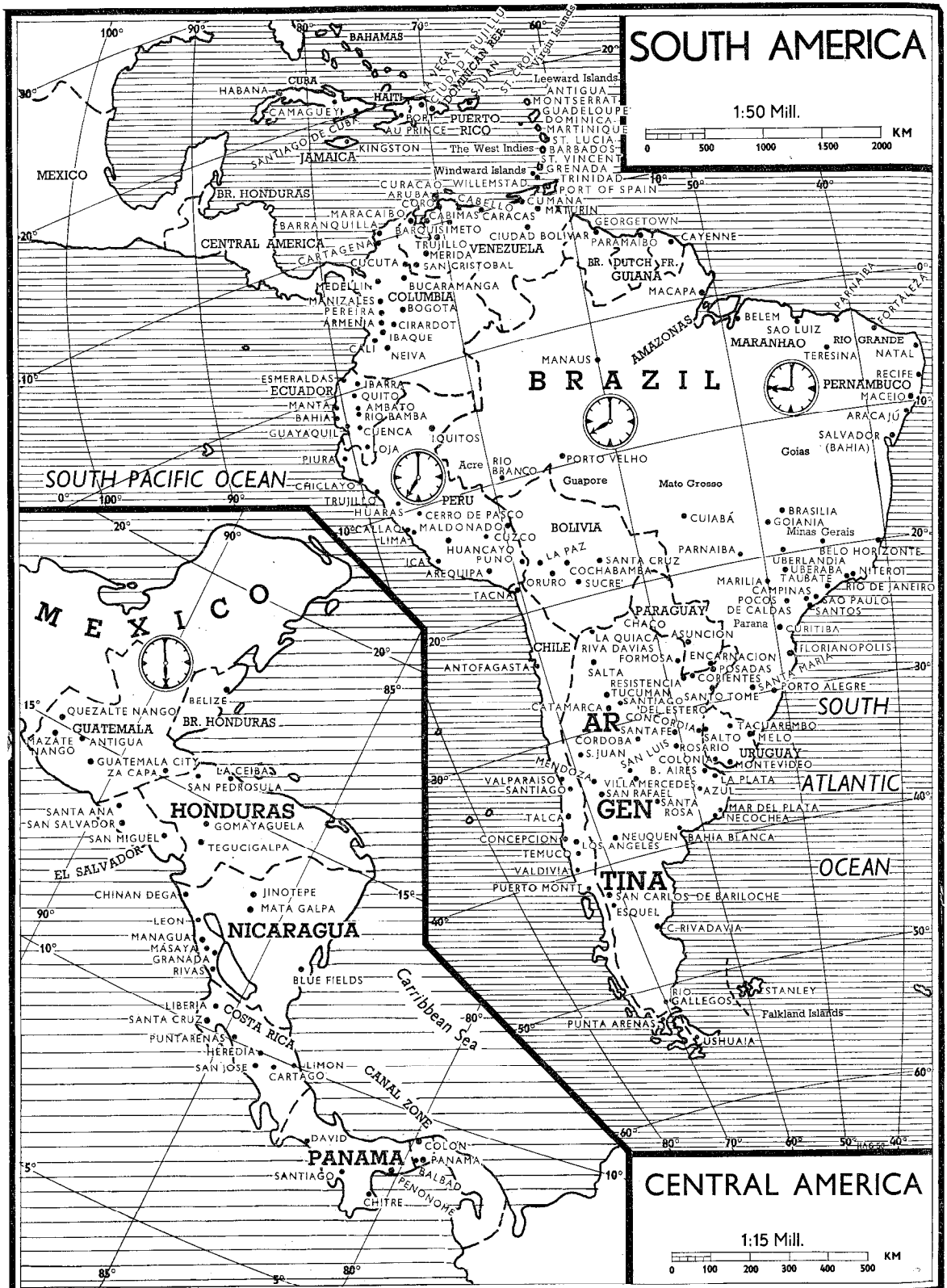
STATION (System: Marconi): 795kc 10kW.

HOME SCE. in English: 10.00–03.00(Sat 04.00). **N**: Every h on the h – **Go. Prgr**: Mo, Tues, Thurs, Fri 00.30 – **Latin-American Music**: W 12.05 – **Studio Concert**: Sun 15.05.

ANN: "This is R. Barbados, The Voice of the Eastern Caribbean 795 on your dial, broadc. to and for the Eastern Caribbean, the peoples choice" - V. by letter. Rp.

BARBADOS REDIFFUSION SERVICE LTD.

FI: By adv – **ADDR**: River Road, Bridgetown. **Cable**: Rediffusion. **Te**: 5126 – **L.P**: Gen. Mgr: Col. R. W. R. Oliver. Eng: G. Duesbury. **D.PRGR**: 09.58–03.03. **N**. (BBC): 11.00, 16.00, 21.00, 23.00, 03.00. Barbados Redif. Sce. participates in We. Indies Net. on s.w. via Messrs. Cable & Wireless (W.I.) during special events like horse racing and cricket matches. The Redif. Sce's will operate on one of the following frequencies via Cable & Wireless: ZNX20 5040, ZNX32 7547 and ZNX49 11015kc.


SOUTH AMERICA
1:50 Mill.
KM
0 500 1000 1500 2000
CENTRAL AMERICA
1:15 Mill.
KM
0 100 200 300 400 500
BAHAMAS
CUBA
HABANA
CAMAGUEY
SANTIAGO DE CUBA
HAITI
PORT AU PRINCE
LA VEGA
CIUDAD TRUJILLO
DOMINICAN REP.
PUERTO RICO
ST. CROIX
Virgin Islands
Leeward Islands
ANTIGUA
MONTSERRAT
GUADELOUPE
DOMINICA
MARTINIQUE
ST. LUCIA
BARBADOS
ST. VINCENT
GRENADA
TRINIDAD
PORT OF SPAIN
The West Indies
JAMAICA
KINGSTON
Windward Islands
WILLEMSTAD
CURACAO
ARUBA
CORO
CABELLO
CUMANA
MATURIN
CARACAS
MEXICO
BR. HONDURAS
MARACAIBO
BARRANQUILLA
BARQUISIMETO
CABIMAS
CENTRAL AMERICA
CARTAGENA
TRUJILLO
MERIDA
VENEZUELA
CIUDAD BOLIVAR
GEORGETOWN
PARAMAIBO
CAYENNE
CUCUTA
SAN CRISTOBAL
BR. DUTCH FR. GUIANA
MEDELLIN
BUCARAMANGA
MANIZALES
COLUMBIA
BOGOTA
MACAPA
PEREIRA
ARMENIA
CIRARDOT
IBAQUE
CALI
NEIVA
BELEM
SAO LUIZ
PARNAIBA
FORTALEZA
MARANHAO
RIO GRANDE
NATAL
TERESINA
MANAUS
AMAZONAS
BRAZIL
ESMERALDAS
IBARRA
ECUADOR
QUITO
MANTA
AMBATO
BAHIA
RIO BAMBA
GUAYAQUIL
CUENCA
IQUITOS
PERNAMBUCO
RECIFE
MACEIO
ARACAJÚ
SALVADOR
(BAHIA)
Goias
PIURA
OJA
Acre
RIO BRANCO
PORTO VELHO
Guapore
Mato Grosso
SOUTH PACIFIC OCEAN
CHICLAYO
TRUJILLO
PERU
HUARAS
CERRO DE PASCO
MALDONADO
CUIABÁ
BRASILIA
GOIANIA
Minas Gerais
CALLAO
LIMA
CUZCO
BOLIVIA
HUANCAYO
PUNO
LA PAZ
PARNAIBA
BELO HORIZONTE
UBERLANDIA
ICA
AREQUIPA
SANTA CRUZ
COCHABAMBA
UBERABA
NITEROI
ORURO
SUCRE
TAUBATE
MARILIA
RIO DE JANEIRO
TACNA
CAMPINAS
POCOS DE CALDAS
SAO PAULO
SANTOS
PARAGUAY
CHACO
ASUNCION
Parana
CURITIBA
MEXICO
CHILE
LA QUIACA
RIVA DAVIAS
ENCARNACION
FLORIANOPOLIS
FORMOSA
ANTOFAGASTA
SALTA
POSADAS
PARANA
RESISTENCIA
CORIENTES
SANTA FE
PORTO ALEGRE
TUCUMAN
SANTIAGO DEL ESTERO
SANTO TOME
QUEZALTE NANGO
BELIZE
CATAMARCA
SOUTH
GUATEMALA
BR. HONDURAS
CONCORDIA
TACUARAMBO
MAZATE NANGO
ANTIGUA
SANTAFE
CORDOBA
SALTO
MELO
GUATEMALA CITY
ZA CAPA
LA CEIBAS
S. JUAN
ROSARIO
SAN LUIS
COLONIA
URUGUAY
MONTEVIDEO
SAN PEDROSULA
MENDOZA
B. AIRES
VALPARAISO
SANTIAGO
VILLA MERCEDES
SAN RAFAEL
AZUL
LA PLATA
ATLANTIC
HONDURAS
SANTA ANA
SAN SALVADOR
GOMAYAGUELA
GEN
SANTA ROSA
MAR DEL PLATA
NECOCHEA
SAN MIGUEL
TEGUCIGALPA
TALCA
CONCEPCION
NEUQUEN
BAHIA BLANCA
EL SALVADOR
LOS ANGELES
TEMUCO
OCEAN
VALDIVIA
CHINAN DEGA
JINOTEPE
TINA
PUERTO MONTT
SAN CARLOS DE BARILOCHE
MATA GALPA
ESQUEL
LEON
NICARAGUA
C. RIVADAVIA
MANAGUA
MASAYA
GRANADA
RIVAS
BLUE FIELDS
Carribbean Sea
RIO GALLEGOS
STANLEY
Falkland Islands
LIBERIA
SANTA CRUZ
COSTA RICA
PUNTARENAS
PUNTA ARENAS
USHUAIA
HEREDIA
SAN JOSE
LIMON
CARTAGO
CANAL ZONE
DAVID
COLON
PANAMA
PANAMA
SANTIAGO
BALBAO
PENONOME
CHITRE

COSTA RICA

L.T: GMT−6 h – Pr.L: Spanish.

DEPARTEMENTO CONTROL NACIONAL DE RADIO
ADDR: Apt. 3483, San José. Cable: Ranac. Te: 7339 – L.P: Dir: L. H. Andrés.

EMPRESARIOS RADIODIFUSORES ASOCIADOS (ERA).
ADDR: Apt. Postal 111, San José – L.P: Pres: R. Barahona Gomez.
STATIONS: All st's comm. exc. 3), 22) (Rlg), 15), 38) (Cultural).

Short Waves: Call: TI—. [1] East & West. [2] North & South.

	Call	kc	m	kW	Name	H of tr.
1)	Q	5954	50.39	1	R. Casino, Puerto Limon	11.55–06.00
2)	HBG	6006	49.95	1	R. Reloj, San José	12.00–06.00
3)	FC	6037	49.69	0.3d[1]	Faro del Caribe, San José W 11.20–19.00, 23.30–04.00. Sun 12.30–16.45, 20.00–04.00	
4)	SRHB2	6075	49.38	1	R. Popular, San José	12.00–05.00
5)	GPH	6215	48.27	1	R. Monumental, San José	11.00–05.00
6)	RICA	9615	31.20	3	La Voz de la Victor, S.José	11.00–05.00
3)	FC	9645	31.10	2d[2]	Faro del Caribe, San José W 11.20–19.00, 23.30–04.00. Sun 12.30–16.45, 20.00–04.00	

Medium Waves: Call: TI—. °=Short Wave.

Call	kc	kW	Call	kc	kW	Call	kc	kW
7) JJH	550	1.5	18) R	925	3	28) RE	1275	1
8) JC	575	1	19) LC	950	1	29) SBJ	1300	2
6) RICA	°625	10	20) RS	975	4	30) NN	1325	1
5) BAS	°650	3.5	21) CEC	1000	1	31) WW	1350	1
10) U	675	1	22) AC	1025	2	32) MAR	1375	1
2) HB	°700	2	23) GPH	1050	1	33) LG	1400	2
11) LX	725	1	3) FC	°1075	10	34) CJ	1425	1
12) RA	750	1	24) EM	1100	1	35) MMC	1450	1
13) W	775	4.5	4) SRHB	°1125	1	36) HCJ	1475	1
5) GPH2	800	3.5	25) SM	1150	1	37) RU	1500	1
14) OS	825	1.5	11) CA	1175	2	38) EEAW	1525	1
15) UCR	850	1	1) Q	°1200	1	39) MET	1550	1
16) SS	875	1.3	26) BSD	1225	1	40) JJC	1575	1
17) CS	900	6	27) ALC	1250	1	41) ACA	1600	1

Short Waves:
1) Apt. 287, Puerto Limon – L.P: Dir: L. Villalobos. V. by letter.
2) Apt. 341, San José – L.P: R. BarahonaG. V. by letter.
3) Apt. 2710, San José. Te: 1250 – L.P: Mgr. F. Cabezas B. Dir. Tec: P. Smith, Dir. Prgr: W. Wortmann – D.Prgr: On all fq's: Spanish: All prgr's in Spanish exc. D 03.00–04.00: English; German: Fri 03.00–03.15. Request Prgr: Sat 01.00–02.45, Tues, Thurs, Sat: 16.00–17.00. Ann: "This is TIFC, the Lighthouse of the Caribbean in San José, Costa Rica". Sp: "TIFC, FARO del Caribe en San José, Costa Rica". V. by QSL-card – Pub: Prgr.sched. free on request.
4) Apt. 341, San José. Te: 5607 – L.P: Dir: R. Barahona. Dir. Tec: A. Morales R. – D.Prgr: N. every h on the h – Ann: "Emisoras de R. Excelsior desde San José, Costa Rica, América Central" – V. by QSL-card or letter. Re. in Sp, E.
5) Apt. 800, San José (TIGPH-2: Nueva Alma Tica) – L.P: Dir: L. Pinto S. V. by letter.
6) Apt. 1079, San José. Te: 3737. Cable: Voz Victor – L.P: Dir. Gen: S. March Palau – D.Prgr: N: every half h and 12.00, 17.00, 21.00, 03.00 – Ann: "Voz de la Victor, R. Internacional de Costa Rica" – V. by QSL-card. Records accepted – F.Pl: mw 50kW.

Medium Waves: D 12.00–05.00 exc. where indicated.
7) **R. Progreso,** Apt. 122, Alajuela. L.P: Dir: E. Martinez.
8) **Radiopolis,** Apt. 854, San José. L.P: J. Casto C.
9) **R. Selecta,** Apt. 4666, San José – 10) **R. Musical,** Apt. 854, San José.
11) **R. Columbia,** Apt. 708, San José (TICA: Apt. 708, Puntarenas).
12) **Radiolandia,** Apt. 2525, San José. L.P: Dir: R. Aguilar V.
13) **R. City,** Apt. 835, San José. L.P: Dir: A. Múrolo C. V. by letter. Re. in E – 14) **R. Titania,** Apt. 512, San José.
15) **R. Universitaria,** San Pedro. L.P: Dir: C. Salazar H. Dir. Tec: A. Mora R. D.Prgr: 14.00–04.00 (Classical music only). V. by letter.
16) **La Voz del Tropico,** Apt. 914, San José.
17) **La Voz de America,** Apt. 517, San José.
18) **Cadena Musical,** Apt. 854, San José. L.P: J. Castro C.
19) **R. Hispana,** Cartago – 20) **R. Athena,** Apt. 208, San José.
21) **R. Cima,** San Ramón. L.P: Dir: C. E. Córdoba.
22) **R. Fides,** Apt. 1933, San José. L.P: Dir: G. Jimenez A. Dir. Tec: A. Lizano. D.Prgr: 11.00–04.15. N: 17.00. Ann: "TIAC, Radio Fides, Emisora Catolica de la Iglesia de Costa Rica".
23) **R. Monumental,** Puntarenas. (Apt. 800, San José).
24) **Columbia Canal 4,** Apt. 708, San José. L.P: C. A. McAdam.
25) **Monumental Canal Dos,** Apt. 800, San José. L.P: L. P. Saborio.
26) **R. Victoria,** Cartago – 27) **R. Universal,** Apt. 3202, San José.
28) **R. Emmaus,** Coronado. L.P: Dir. Gen: C. H. Rodriquez Q. Dir. Tec: A. D. Romero. D.Prgr: 11.50–03.15.
29) **R. Libertad,** Apt. 4075, San José.
30) **R. Nandayure,** Tilarán, Gte. L.P: Dir: H. Reuben A.
31) **R. Centro,** Puntarenas – 32) **R. Tropical,** Heredia.
33) **R. Cariari,** Limón – 34) **R. Sinai,** San Isidro del General.
35) **R. Golfito,** Puerto Golfito. V. by letter.
36) **R. Regional,** San Carlos. V. by letter. F.Pl: Sw-st. 49 mb.
37) **R. Union,** Liberia Gte – 38) **R. Turrialba,** Turrialba.
39) **Servicio Meterológico,** Minist. Agricultura, San José.
40) **La Voz de Guanacaste,** Liberia.
41) **La Voz de Costa Rica,** San José. L.P: Dir: A. Cespedes A.

CUBA

L.T: GMT−5 h – Pr.L: Spanish.

MINISTERIO DE COMUNICACIONES
Direccion General de Telecomunicaciones.
ADDR: Plaza de la Revolúción "José Martí", La Habana.

INSTITUTO CUBANO DE RADIODIFUSION,
Edif. Radiocentro, Ly 23, Vedado, Habana.

RADIO HABANA CUBA
ADDR: Apt. Postal 7026, Habana.

STATIONS: 10/100kW.

kc	m	kc	m	kc	m	kc	m	kc	m
5975	50.21	9525	31.50	11760	25.51	15155	19.80	17855	16.80
5990	50.08	9625	31.17	11770	25.49	15210	19.72	17875	16.78
6015	49.88	9655	31.07	11840	25.42	15230	19.70	21460	13.98
6060	49.50	9675	31.01	11865	25.34	15270	19.65	21600	13.89
6100	49.18	9765	30.72	11970	25.06	15315	19.59	21630	13.87
6135	48.90	11735	25.56	15135	19.84	15340	19.56		

FOREIGN SERVICE (Nov 64 – Feb 65):

[1] to No. Europe; [2] to No. America; [3] to So. America; [4] to Mediterranean; [5] to Europe; [6] to Caribbean.

Arabic	kc	English	kc	French	kc
20.00–21.10[4]	9655	20.10–21.40[1]	6015	19.00–20.10[5]	6015
Creole		20.50–21.50[3]	15135	21.10–21.40[4]	9655
02.00–03.00[6]	6060	03.00–04.30[2]	6135	04.30–05.00[2]	6135
		05.00–06.00[2]	6135	Portuguese	
				23.00–24.00[3]	15340

ANN: "Aqui R. Habana Cuba" – V. by QSL-card and letter.

Medium Waves:

Call	kc	kW	Call	kc	kW	Call	kc	kW	Call	kc	kW
CY[1]	550	2.5/15	JY[6]	760	1	CF[1]	910	10	KS[11]	1070	1
KM[2]	560	5	DC[2]	770	1	GX[12]	910	1	FA[5]	1100	1
HI[3]	570	10	HB[7]	780	1	JL[5]	920	10	HM[3]	1130	1
W[1]	590	15/25	CH[1]	790	10	AQ[14]	920	1	BQ[1]	1160	1/5
KV[2]	600	2.5	JS[6]	800	1	KN[4]	930	1	KB[4]	1170	1
KU[4]	630	2	KL[4]	800	2	BF[1]	950	10	HK[10]	1210	1
HQ[3]	630	15	CU[1]	820	1/5	JN[5]	960	1	CI[1]	1260	5
Q[1]	640	5/50	BZ[1]	830	1	KD[2]	970	1	JC[5]	1270	1
CU[1]	660	1/5	AN[14]	840	1	CK[1]	980	5	HA[3]	1280	1
KP[2]	670	1	KC[4]	850	1	JG[5]	1000	1	JQ[13]	1300	1
JE[5]	680	1	BL[1]	860	1/15	BF[1]	1010	10	HO[3]	1310	1
BC[1]	690	50	JB[5]	880	1	HS[8]	1020	1	DA[4]	1320	1
CA[1]	730	10	AG[9]	880	1	JR[5]	1030	1	JF[5]	1340	1
KJ[2]	740	10	HD[3]	890	1	CX[1]	1040	0.25/10	HC[3]	1410	1
CD[1]	760	10	JV[6]	900	1	AB[14]	1070	5			

[1] Habana; [2] Holguin; [3] Sta. Clara; [4] Stgo. de Cuba; [5] Camaguay; [6] Ciego de Avila; [7] Sancti Spiritus; [8] Cabarien; [9] Concolación del Sur; [10] Cruces; [11] Guantanamo; [12] Matanzas; [13] Nuevitas; [14] Pinar del Rio.

PARA TODOS LECTORES HABLANDO ESPAÑOL

A fin de emplear el WRTH sin dificultades ofrecemos a todos nuestros lectores, que hablan el castellano, un vocabulario inglés-español que contiene todas las palabras y frases que se utilizan por lo general en todos resumens y tablas en el manual. Este vocabulario capacitará a todas personas con un poquito o sín conocimiento ninguno al idioma inglés para entender y emplear el WRTH sin difficultades. Si quiere un ejemplar, libre de gastos, sírvase escribír a

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DOMINICAN REPUBLIC

L.T: GMT −5 h – Pr.L: Spanish.

DIRECCION GENERAL DE TELECOMUNICACIONES

ADDR: Santo Domingo. **Cable:** Telecom. **Te:** 22244 – **L.P:** Dir. Gen: Raul A. Cabral Navarro.

STATIONS: Approx. 11.00–05.00 (exc. where indicated). All comm.
Short Waves: Call: HI—. *=inactive. P=Puerto. Sto=Santo.

	Call	kc	m	kW	Name and h of tr.
1)	AU	*3205	93.60	0.5	Broadc. Tropical, P. Plata
2)	DB	3225	93.05	1	R. Libertad, Santiago: 11.00–03.00
3)	RM	3265	91.87	1	R. Sol, Higuey: 12.00–03.00
4)	SD	3285	91.32	7.5	R. Sto. Domingo: 10.55–05.02
5)	BA	3305	90.77	1	Emis. Unidas, Santo Domingo
6)	SD	3325	90.23	20	R. Sto. Domingo Televisión
7)	BD	3355	89.42	0.25	La Voz de la Romana, Romana
8)	AD	3375	88.89	1	R. San Juan
9)	DA	3385	88.63	1	R. Hit Musical, Santiago: W 10.55–04.00, Sun 13.00–01.00
10)	AZ	3395	88.37	1	R. Santiago: irr.
11)	AS	4780	62.76	1	Onda Musical, Sto. Domingo: 11.00–05.00
12)	FF	4840	61.98	1	La Voz del Atlantico, P. Plata
13)	BC	4860	61.73	0.25	La Voz del Progreso, San Francisco de Macoris: 11.00–03.00
14)	JP	4880	61.48	1	R. Comercial, Sto. Domingo
15)	N	4910	61.10	1	R. HIN, Sto. Domingo
16)	CV	*4930	60.85	0.6	La Voz del Biran, Barahona
17)	CN	4960	60.48	1	R. Antillas, Sto. Domingo
18)	CK	4980	60.25	0.25	Ondas del Yaque, Santiago
19)	BB	5030	59.64	1	La Voz del Papagayo, La Romana
20)	L	*5055	59.36	0.5	La Voz del Tropico, Sto. Domingo
21)	HD	6025	49.79	0.1	La Voz de Oriente, San Pedro de Macoris: 11.30–06.30
10)	AZ	6060	49.50	0.5	R. Santiago: 11.00–03.00
2)	DB	6075	49.38	0.25	R. Libertad, Santiago
6)	SD	6090	49.26	7.5	R. Sto. Domingo Televisión: 10.55–05.02
22)	Z	6110	49.10	1	Broadc. Nacional, Sto. Domingo: 11.45–04.30
23)	CB	6120	49.02	0.5	R.Dif. HICB, Santiago
24)	G	*6130	48.94	0.25	R.Dif. HIG, Sto. Domingo
1)	AU	6190	48.47	0.1	Broadc. Tropical, P. Plata: 11.00–03.00
6)	SD	9505	31.56	50	R. Sto. Domingo Televisión
24)	G	*9590	31.28	0.25	R.Dif. HIG, Sto. Domingo

Medium Waves: Call: HI--. °=Short Wave.

Call	kc	kW	Call	kc	kW	Call	kc	kW
25) AA	560	0.5/0.25	23) CB	°1050	1/0.1	49) BZ	1340	1
26) MS	570	1	27) BJ	1060	1/0.25	22) XZ	1350	1
27) BJ	590	1/0.25	39) BF	1070	1/0.25	4) SD	1360	1/0.5
28) AB	590	0.5	40) MC	1100	0.5	4) SD	1370	1
4) SD	°620	10	17) CN	°1120	1	4) SD	1380	1
29) AE	630	1	41) RL	1130	1/0.25	4) SD	1390	1
30) AT	650	5	11) AS	°1150	1	50) AL	1400	0.25
31) AM	660	2	42) BE	1180	1/0.25	10) AZ	1410	0.5
32) BQ	670	1/0.25	43) DV	1190	0.5	51) AE	1420	1
33) AW	690	5	15) N	°1220	1	52) BG	1430	1/0.25
34) DC	700	1	27) BJ	1230	1/0.25	53) AK	1440	0.25
35) AQ	720	1	1) AU	1240	0.25	8) AD	°1440	1
22) Z	°740	0.5/0.1	16) CV	°1240	0.25	54) AC	1450	0.25
36) MD	760	0.5	13) BC	°1250	1/0.1	55) AR	1450	0.2
20) L	°790	5	44) T	1260	0.25	56) AN	1460	0.5
10) AZ	°820	1/0.1	4) SD	1270	1	57) AG	1470	0.5
27) BJ	830	5/1	45) VM	1290	1	58) AH	1490	0.25
4) SD	°860	5	46) KQ	1300	1	59) AP	1490	0.25
37) PJ	890	1/0.25	1) AU	°1300	2	60) BH	1490	1/0.25
5) BA	°910	0.5	47) AV	1310	0.5	61) BL	1530	1/0.25
18) CK	°920	2.5	4) SD	1310	1	62) AJ	1590	1
24) G	°950	0.25	21) HD	°1320	5	63) BI	1590	1/0.25
12) FF	°960	5	2) DB	°1330	5	64) BS	1600	1
38) SA	980	0.75	48) PT	1340	0.25	9) DA	°1600	1
14) JP	°1020	5						

Short Waves:

1) Ca. Beller, P. Plata – **L.P:** Dir: J. Rojas – V. by QSL-card.
2) Máximo Gomez 14, Santiago. **Te:** 2924 – **L.P:** Dir: A. Vanderhorst – **Ann:** "Desde Santiago, en la República Dominicana transmite R. Libertad, Sintoniá perfecta en todo el pais".
3) Ca. Altagracia 64, Higuey. **Te:** 43 – **L.P:** R.A. Morales S.
4) Ca. Dr. Tejada Florentino 8, Sto. Domingo. **Cable:** Dominicana. **Te:** 2-3191 – **L.P:** Dir. Gen: J.C. Martinez – **D.Prgr:** N: 11,00, 15.00, 19.00, 21.00, 03.30. **English:** 02.00–02.15 – **Ann:** "Al Servicio del progreso y la cultura en general, transmite R. Santo Domingo desde Santo Domingo, Distrito Nacional, Capital de la Rep. Dominicana" – V. by QSL-card – **Relay st's:** 1360 Santiago, 1380 La Vega.
5) Edif. Ocaña, Luperón 17, Sto. Domingo – **L.P:** Dir: P. Julio S.
6) Centro de los Héroes de Constanza, Sto. Domingo. **Te:** 3-1146 – **L.P:** Dir: H. Inchaustegui C – **Ann:** "Desde Sto. Domingo, Ciudad Primada de América, Capital de la República Dominicana, transmite R. Caribe" – V. by QSL-card.
7) Castillo Marquez 28, altos, La Romana – **L.P:** Dir: N. Mariñez – **Ann:** "Transmite HIBD, la Voz de la Romana..."
8) Capotillo 106, San Juan de la Maguana. **Te:** 99 – **L.P:** Dir: Dr. O. Cucurullo R.
9) 30 de Marzo 35, Santiago. **Cable:** Maja. **Te:** 3246 – **L.P:** Dir. Gen: M.A. Jorge A – **D.Prgr:N:** W. 11.00, 13.00, 17.00, 18.15, 19.00, 22.00, 23.15, 24.00, 00.45, 01.45, 02.15, 03.00 – **Ann:** "H-I-D-A, R. Hit Musical, Santiago de los Caballeros, República Dominicana. Con sus frequencias de 1600 y 3385 kc respectivamente" – V. by QSL-card. Records accepted.
10) 30 de Marzo 27, Santiago. **Te:** 3300 – **L.P:** Dir: L. Felipe Moscoso. Dir.Tec: J. E. Macdougal – **D.Prgr:N:** 16.30, 22.45 – **Ann:** "Circuito de Emisoras de R. Santiago, Ondas corta y larga, 89.2Mc, Frequencia Modulada, en Santiago, República Dominicana" – V. by QSL-card. Re. in Sp, E.
11) Palo Hincado 48, Sto. Domingo, **Te:** 2-6129 – **L.P:** Dir: R. Pacheco – **D.Prgr:** N: 01.30 – V. by letter.
12) Ca. Comercio 21, P.Plata. **Te:** 567 – **L.P:** Dir: D. Brugal Alfau.
13) P.O. Box 267, San Francisco de Macoris. **Te:** 2845 – **L.P:** Dir. Gen: J. Raposo P – **D.Prgr:** N: 01.00 – **Ann:** "Por la Cultura del Pueblo y la Prosperidad de la Patria, transmite La Voz del Progreso desde San Francisco de Macoris" – V. by QSL-card.
14) Edif. Armenteros, El Conde 24, Sto. Domingo.
15) Centro de los Héroes de Constanza, Sto. Domingo. **Te:** 3-1021 – **L.P:** Adm. A. Cannizaro. Dir. Tec: J. L. Martin C – **D.Prgr:** N: 12.05, 23.35, 04.00 – **Ann:** "R. Hin desde la Feria de la Paz" – V. by QSL-card. Re. in Sp, E.
16) Apolinar Perdomo 1, Marahona. **Te:** 101 – **L.P:** Dir: E. Lama – **Ann:** "R. Barahona, La Voz del Birán..."
17) Edif. Jaar, Sto. Domingo. **Te:** 9-8728 – **L.P:** Dir: M. Zaglul.
18) Ca. El Sol Esq. 30 de Marzo, Santiago. **Te:** 2144 – **L.P:** Dir. Gen: R. Candelario Llenas. Dir. Tec: L. Silverio – **D.Prgr:** N: 11.00 – **Ann:** "Transmite Ondas del Yaque, desde Santiago de los Caballeros en la República Dominicana" – V. by QSL-card.
19) Casa P. Rico, La Romana – 20) Ca. Abreu 30, Sto Domingo. **Te:** 2-2370 – **L.P:** Dir: P. Justiniano – V. by QSL-card.
21) Duarte 20, San Pedro de Macoris. **Te:** 888 – **L.P:** Dir: F. M. Donastorg – **Ann:** "R. Oriente, en el Este, la mas potente. Emisoras HIHD 1320 kc onda larga y HIIJ 6025kc banda de 49 metros desde San Pedro de Macoris en la República Dominicana" – V. by QSL-card.
22) Apt. 201, Sto. Domingo. **Te:** 2-2839 – **L.P:** Dir: Ing. F. Hatton – **Ann:** "Transmiten las Emisoras Nacionales HIZ desde Sto. Domingo, capital de la República Dominicana".
23) P. O. Box 454, Santiago de los Caballeros. **Te:** 2939 – **L.P:** Dir. Gen: J.L. Sánchez. Dir. Tec: J.B. Sánchez – V. by QSL-card.
24) Av. Mella 144, Sto. Domingo. **Te:** 2-2936 – **L.P:** Dir: A. Cordero P.

Medium Waves:

25) **Emis. HIAA,** Santiago – **L.P:** Dir: J.W. Streese.
26) **R. Cristal,** El Conde 24, Sto. Domingo. – **L.P:** Dir: M. Báez A.
27) **Editora del Caribe,** C. Por A, Sto. Domingo (590kc San Pedro de Macoris; 830kc Sto. Domingo; 1060kc Barahona; 1230kc Moca).
28) **Emis. HIAB,** Apt. 17, P. Plata – **L.P:** Dir: Lic. J. Mendez.
29) **Emis. HIAF,** Monte Cristy – **L.P:** Dir: R.O. Moscoso Cordero.
30) **R. Universal,** Hotel Jaragua, Sto. Domingo – **L.P:** Dir: E.A. Pérez.
31) **R. Aeropuerto,** Santiago – **L.P:** M. Tulio Cepeda.
32) **Emis HIBQ,** Ca. 35 Este 51, Ens. Luperón, Sto. Domingo, – **L.P:** Dir: J. Espinal Martinéz – 33) **Emis HIAW,** El Conde 108, Sto. Domingo – **L.P:** Dir: R.A. Aracena F
34) **R. Mao,** 27 de Febrero 71, Valverde – **L.P:** Dir: T. Pujols S.
35) **R. Norte,** Ca. Pedro Fco. Bono 58, Santiago – **L.P:** Dir: A. Perez.
36) **R. Tamboril,** Peña – **L.P:** Dir: A. Dajer B – 37) **Emis HIPJ,** Ca. Teniente Amado Garcia Guerrero 77-A, Sto. Domingo – **L.P:** Dir: P. Justiniano P.
38) **R. Cibao,** Benito Mación 17, Santiago – **L.P:** Dir: C. Pou.
39) **Emis. HIBF,** Apt. 309 y 310, Sto. Domingo – **L.P:** Dir: M.E. Baez Asunción.
40) **R. Programa Quisqueya (R.P.Q.),** Edif. Jaar, Sto. Domingo – **L.P:** Dir: V.M. Furment Uribe – 41) **R. Exitos,** 16 de Agosto 129, Santiago – **L.P:** Dir: D. dela Rosa. V. by letter.
42) **R. Mil,** Edif. Jaar, El Conde 98, Sto. Domingo – **L.P:** Dir: J.B. Jimenez M.
43) **R. Santa Maria,** Sto. Cerro, La Vega – **L.P:** Dir: P. Wenceslao G.
44) **Emis. HIT,** Apt. 206, Sto. Domingo – **L.P:** Dir: Gen: R. Menéndez.
45) **Emis. HIVM,** Ca. Duarte esq. Mella, Bonao.
46) **Emis. HIKQ,** Apt. 209, Sto. Domingo – **L.P:** Dir. Gen: R.A. Martinez G.
47) **Emis. HIAV,** Ca. Uladislao Guerrero 24 Oeste, Baní – **L.P:** Dir. Gen: Manuel E. Bello – 48) **R. San Francisco,** 27 de Febreo Esq. Billini, San Francisco de Macoris – **L.P:** Dir: V. Ferrer T – 49) **Emis.**

HIBZ, Ca. 16 de Agosto 23, San Juan de la Maguana – **L.P:** Dir. Gen: I. Aquiles R. – 50) **Ondas del Valle,** Ca. Restauración 2, La Vega – **L.P:** Dir: D.V. de Moya.
51) **R. Tricolor,** Ca. Abreu 66, Sto. Domingo – **L.P:** Dir: H. Hernandez Llaverias.
52) **Emis. HIBG,** Peña – **L.P:** Dir: R. Leonidas Macdugal.
53) **Emis. HIAK,** Ca. 27 de Febreo 27, Esq. Colon, Salcedo.
54) **R. Salcedo,** Ca. Duarte Salcedo – **L.P:** Dir: P.M. Bencosme Guzmán.
55) **Emis. HIAR,** Hotel San Cristóbal – **L.P:** Dir: El Alberti T.
56) **Emis. HIAN,** Ca. Santana S/N, San Cristóbal.
57) **Emis. HIAG,** Ca. San Luis 25, Santiago.
58) **Emis. HIAH,** Sto. Domingo – **L.P:** Dir. Gen: J. Jiménez B.
59) **R. Gabino,** Ca. Caonabo 81, Moca – **L.P:** Dir: G. Nunez.
60) **Emis. HIBH,** Samana – **L.P:** Dir: A. Vanderhorst.
61) **R. Pueblo,** Apt. 1099, Sto. Domingo – **L.P:** Dir: P. Pou Saleta – **V.** by letter – 62) **R. Union,** Edif. Jaar, El Conde 98, Sto. Domingo – **L.P:** Dir: L. Bolivar Rosario S – 63) **Emis.HIBI,** Ca. Francisco Esq. Castillo (altos), La Vega.
64) **Emis. HIBS,** Av. Francisco Dominguez Caarro, San Pedro de Macoris.

EL SALVADOR

L.T: GMT–6 h – **Pr.L:** Spanish.

GOVERNMENT DEPT. FOR BROADCASTING

ADDR: Ministerio del Interior, Palacio Nacional, San Salvador – **L.P:** Ministerio del Interior: Col. F. Sanchez H.

ASOCIACIÓN SALVADOREÑA EMPRESARIOS RADIODIFUSIÓN

ADDR: Apt. Postal 720, San Salvador – **L.P:** Pres: M. Flores.

STATIONS: All st's comm. exc. R. Nacional, 42) (Cultural).
Short Waves: Call: YS--. *=inactive.

	Call	kc	m	kW	Name
1)	CB	4840	61.98		La Voz del Pacifico, Sonsonate
2)	W	*5985	50.13	1	R. Santa Ana
3)	S	6010	49.92	5	R. Nacional de El Salvador, San Salvador: 16.00–04.00
4)	KL	6090	49.26	1	Radiocadena YSKL, San Salvador
5)	C	*6096	49.21	1	Ondas Populares y Deportivas, San Salv.
6)	P	*6150	48.78	0.3	La Voz de Cuscatlán, Cojutepeque
7)	UA	*6190	48.47	1	R. Mil Cincuenta, San Salvador
8)	V	9545	31.43	1	La Voz del Comercio, Santa Ana
3)	S	9555	31.40	5	R. Nac. de El Salvador, San Salvador: 16.00–04.00
9)	Y	*11725	25.58	1	R. Victoria, San Salvador
10)	AX	*11950	25.10	1	La Voz Panamericana, San Salvador

Medium Waves: Call: YS--; °=Short Wave; *=under constr.

	Call	kc	kW		Call	kc	kW		Call	kc	kW
11)	ABC	560	5	23)	DR	820	1	35)	G	*1130	2
12)	EB	580	10	24)	F	840	1	36)	T	1140	1
13)	NK	600	5	25)	RC	*860	1	37)	CF	1150	1
14)	LN	630	1	26)	AR	870	1	1)	CB	°1175	1
3)	S	°655	10	27)	LA	*890	5	38)	CG	1210	1
15)	QR	700	5	28)	QJ	910	10	39)	MA	*1230	1
16)	RS	710	1	2)	W	°930	1	40)	I	1250	3
17)	RA	720	1	29)	ON	*940	2	8)	V	°1280	1
18)	RU	720	1	9)	Y	°970	1	41)	HX	1300	1
19)	R	730	10	30)	AN	*980	1	42)	HQ	1330	10
20)	RM	740	1	31)	AS	*990	10	43)	CD	1360	5
21)	KLA	750	1	5)	C	°1015	10	44)	HZ	*1380	2.5
4)	KL	°760	10	7)	U	°1050	10	45)	JI	1400	1.5
22)	KLB	770	5	32)	DM	1080	10	46)	HF	1430	5
6)	P	°780	10	33)	M	*1100		47)	TG	*1470	1
10)	AX	°800	10	34)	OA	1120	1.5	48)	FN	*1500	5

Circuito YSR (Comm.): (St's 16), 17), 18), 19), 20)) – **Addr:** Apt. Postal 720, San Salvador. **Te:** 3250. **Cable:** Yesere – **L.P:** Pres. & Gen. Mgr: B. Eserski. Dir. Prgr: J. David Calderón. Dir. Tec: R. Orantes – **D.Prgr:** All st's 12.00–06.00 – **Ann:** "Circuito YSR, la emisora popular" – **V.** by QSL-card and letter. Re. in Sp, E – Prgr.schedule free.
Radio Televisión YSU, S.A. (Comm.): (St's 2), 7), 11), 15)) – **Addr:** Apt. Postal 1050, San Salvador. **Te:** 1050. **Cable:** Ysusa – **L.P:** Pres: A. Soler Serra. Mgr: M. de S. Castellanos. Dir. Prgr: R. del Monzón. Dir. Tec: R. H. Rahn – **D.Prgr:** All st's 12.00–06.00. **N:** 03.30, 05.50 + short N. every 15 min – **Ann:** "En El Salvador, Centro América transmite R. Cadena YSU" – **V.** by QSL-card and letter. Re. in Sp, E – **Pub:** Prgr.schedule free.
Cadena Radial Salvadoreña, S.A: (St's 12), 23), 32)) – **Addr:** Edif. Torre Lopez, 3° piso, San Salvador. **Cable:** Carasal. **Te:** 3331 – **L.P:** Dir. Gen: G. Ramos. Dir. Prgr: H. Amaya. Dir. Tec: O. Tario H – **D.Prgr:** All st's 12.00–06.00.
Radio Cadena YSKL: (St's 4), 21), 22), 37)) – **Addr:** Box 1329, San Salvador. **Te:** 6830 – **L.P:** Gen. Mgr: M. A. Flores. Dir. Prgr: R. Carranza. Dir. Tec: E. Gamero Martinez – **D.Prgr:** YSKL 24 h. Other st's: 12.00–07.30. **N.** every 15 min.
Short Waves:
1) 6a Av. Norte 15, Sonsonate – 2) Santa Ana – **V.** by QSL-card.
3) Alma Cuscatleca, Altos del Edif. del Teatro Nacional, San Salvador. **Te:** 4376. **Cable:** "Almacus" – **L.P:** Dir. Gen: A. B. Parada. Dir. of Prod: A. Alfonso M. Dir. Tec: A. Hernandez – **D.Prgr: N:** every 15 min's. **Wrp:** 18.00, 03.00 (exc. Sun). Many irr. tr's (for Go. Prgr's) – **Ann:** "Transmite R. Nacional de El Salvador, en la América Central" – **Int-Sig:** Four notes on xylophone – **V.** by QSL-card.
4) R. Cadena YSKL (see above).
5) Ca. Oriente 218, San Salvador – **Ann:** "Esta es YSC, R. 1015 Ondas Populares y Deportivas en San Salvador", Centro América, Laboremos por la Paz, la Cultura y el Deporte".
6) Cojutepeque, Dept. de Cuscatlan – 7) Apt. Postal 1050, San Salvador – **V.** by letter – 8) Santa Ana, Dept. de Santa Ana – 9) Ca. Gerardo Barrios 627, San Salvador.
10) 2a Av. Norte 319, San Salvador. **Cable:** Ysar – **D.Prgr:** 12.00–05.00. **N:** 12.30, 19.30.
Medium Waves: D.Prgr: Approx. 12.00–05.00.
11) **Radioemisora Salvadoreña,** San Miguel.
12) **Cadena Radial Salvadoreña,** Edif. Torres Lopéz, San Salvador.
13) **R. Exitos,** Edif. Cierra, San Salvador – 14) **R. 630,** Casa Flores, San Salvador – 15) **R. Morazán,** Mejicanos. Own prgr's 12.00–06.00.
16) **Circuito YSR,** Sonsonate – 17) **Circuito YSR,** Santa Ana.
18) **Circuito YSR,** Usulután – 19) **Circuito YSR,** San Salvador.
20) **Circuito YSR,** San Miguel.
21) **R. Universal,** Santa Ana – 22) **R. Universal,** Usulután.
23) **R. Tropical,** Santa Ana – 24) **R. Vanguardia,** San Salvador.
25) **R. Tecána,** Santa Ana – 26) **R. América,** San Salvador – 27) **R. Musical,** Santa Ana – 28) **R.Dif. YSQJ,** San Salvador – 29) **R.Dif. YSON,** San Salvador – 30) **R.Dif. YSAN,** Ahuachapán – 31) **R. Assai,** San Salvador – 32) **Cadena Radial Salvadorena,** San Miguel – 33) **R. Dif. YSM,** San Salvador.
34) **R.Dif. YSOA,** San Salvador – 35) **R. Chaparrastique,** San Miguel.
36) **R.Dif. YST,** San Salvador – 37) **Cadena del Pacífico,** Sonsonate.
38) **La Voz Suprema de Occidente,** Santa Ana – 39) **R. Sistema Cultural,** Santa Ana – 40) **R. Reloj,** San Salvador – 41) **Radiocadena 1300,** Mejicanos.
42) **R. Progreso,** Apt. 855, San Salvador – **L.P:** Dir. Gen: S. Echegoyen. Dir. Tec: D. C. Solt – **D.Prgr: Spanish:** 12.00–03.00. **English:** 03.00–04.00. Operated by contributions from local protestant churches.
43) **Cadena del Pacífico,** Santiago de Maria – 44) **R.Dif. YSHZ.**
45) **La Voz del Litoral,** Usulután – 46) **R. Caribe,** Cojutepeque.
47) **R. Sonora,** San Salvador – 48) **R.Dif. YSFN,** San Salvador.

GUADELOUPE (French West Indies)

L.T: GMT–4 h – **Pr.L:** French.

OFFICE DE R. DIFF. TELEVISION FRANÇAISE

ADDR: Basse – Terre. **Te:** 148 – **L.P:** Dir: vacant. Dir. Tec: Angelet.
STATIONS (System TRT):
Pointe-a-Pitre 640kc 20kW – Basse-Terre 1420kc 4kW.
HOME SCE: W 10.15–11.30, 15.00–18.00, 22.00–02.00. Sun 10.15–02.00 – **Wrp:** 17.30, 23.30.
ANN: "Ici Radiodiff. Française Basse-Terre" – **INE-SIG:** Guitar – **V.** by letter. Rp.

GUATEMALA

L.T: GMT–6 h – **Pr.L:** Spanish.

DIRECCION GENERAL DE RADIODIFUSION Y TELEVISION NACIONAL

ADDR: Edif. de la Tipografia Nacional, Ca. 18 de Septiembre 6–72 Zona 1, Guatemala. **Cable:** Tevenac. **Te:** 23318 – **L.P:** Dir. Gen: M. Mendoza Hidalgo.
STATIONS: All st's comm. exc. 10), 20), 23), 26), 53) Go; 1), 2), 3), 5), 7), 8) Educ. **Locations:** Guatemala City exc. where indicated.
Short Waves: Call: TG---. *=inactive.

	Call	kc	m	kW	Name	Approx. h of tr.
1)	RW	2340	128.4	0.1	Santa Cruz Barillas, Huehuetenango	
2)	SC	2350	127.6	1	La Voz de Candelaria, Huehuetenango:	22.45–24.00
3)	BA	2360	127.1	0.5	R. Maya Barillas, Huehuetenango	
4)	ZB	3365	89.45	0.15	R. Club	
5)	VN	3360	89.29	0.2	La Voz de Nahualá, Nahualá, Sololá	
6)	LAB	*4900	61.22		R. Victoria	

7) RY	4920	60.98	0.2	La Voz de San Raymundo, S. Raymundo:	23.00–06.00
8) RH	4940	60.73	0.2	Escuela Relaciones Humanas	
9) NA	5955	50.40	5	R. Cultural	12.00–03.00
10) MZ	5970	50.25	0.5	R. Nacional, Mazatenango	
11) AR	5980	50.17	1	R. Quetzal	13.00–04.30
12) JA	5990	50.08	5	R. Nuevo Mundo	11.55–06.00
13) TA	6000	50.00	1	R. Sonora	12.00–06.00
14) DA	6020	49.83	1	La Voz de Occidente, Quetzaltenango	
15) TQ	6030	49.75	5	R. Internacional	12.30–06.00
16) CO	6040	49.67	0.5	La Voz del Trópico, Quetzaltenango	
17) XB	*6050	49.59		R. Centro Musical	
18) RLA	6060	49.50	1	R. Cadena Landivar, Quetzaltenango:	11.00–05.00
19) PA	6070	49.42	0.4	R. Palmeras, Escuintla	
20) SM	6080	49.34	0.5	R. Nacional, San Marcos	
21) DZ	6090	49.26	2	R. Centroamericana	11.00–06.00
22) OA	*6100	49.18		La Voz de las Americas	
23) QA	6110	49.10	1	La Voz de Quezaltenango	13.00–04.00
24) HC	6140	48.86	1	R. Universal	12.00–06.00
25) AZ	6150	48.78	0.5	R. Continental	12.00–06.00
4) ZA	6160	48.70	0.25	R. Club	12.00–06.00
26) WB	6180	48.54	1	La Voz de Guatemala	12.00–06.00
27) FP	6190	48.47	0.5	R. Nacional Tikal, Flores Peten	
28) KN	*6200	48.39		R. Latina	
9) NB	9670	31.02	5	R. Cultural	03.00–04.00
23) QB	11700	25.64	1	La Voz de Quezaltenango	13.00–04.00
30) RA	11750	25.53	0.5	R. Modelo, Retalhuleu	

Medium Waves: Call: TG--. °=Short Wave. *=also FM.

Call	kc	kW	Call	kc	kW	Call	kc	kW
31) BOL	560*	10	25) AX	°950*	0.5	11) AQ	°1270	1
19) PR	°575	0.4	42) CQ	980	1	53) TU	1280	0.5
32) Y	590*	1	43) AH	1000	0.2	54) AJ	1280	0.7
33) VA	610	0.5	44) UX	1020	10	55) MU	1300	0.2
34) GA	620*	0.5	17) XA	1040*	10	26) WC	°1360	10
26) W	°640	10	45) AF	1060	2	13) T	°1390*	10
35) RT	660	0.5	14) D	1070	0.35	56) AC	1400	0.5
36) RS	680	2	18) RL	°1070	2	57) GH	1410	0.5
37) HR	700*	5	46) C	1080	0.5	58) RP	1420	0.5
9) N	°720	5	18) AV	1090	1	10) MS	°1450	0.5
38) RF	750	0.5	28) K	°1100	1	59) AG	1460	0.5
39) BX	770	0.5	47) RR	1120	0.8	16) COA	°1470	0.5
24) HB	°780	1	22) O	°1140	5	60) IZ	1470	0.5
15) TO	°810	5	4) Z	°1170	0.5	61) HU	1480	0.5
23) Q	°830	1	48) ED	1210	1	21) DX	°1500	0.5
40) X	850	3	49) ED	1210	1	62) MG	1520	1
20) SM	°860	1.5	50) LL	1230	0.5	30) RE	°1540	1
12) J	°880*	10	51) L	1240	1	63) RE	1540	1
41) TL	920	5	52) LG	1250	0.5			

Short Waves:

1) Rev. W. Woods, Santa Cruz Barillas, Huehuetenango – 2) Convento Jacaltenango, Huehuetenango – **L.P:** St. Mgr: A. Lopez. Dir. Tec: R. P. J. McNeill, MM – **D.Prgr:** Spanish 22.45, Jacalteco 23.50 – **Ann:** "Esta es TGSC, La Voz de Nuestra Señora de Candelaria, transmitiendo en una frequencia de dos mil tres cientos cincuenta kc desde el Pueblo de Jacaltenango en el Departamento de Huehuetenango en la República de Guatemala en Centro América" – V. by letter. Rp.

3) Santa Cruz Barillas, Huehuetenango – 4) 3a Ave 12–29 Z-1, Guatemala – 5) Nahualá, Sololá – 6) Mazatenango, Such.

7) Mpo. San Raymundo – **L.P:** Dir. Gen: V. M. Garcia Rojas. Dir. Tec: J. Luis Ortiz – V. by QSL-card. Records accepted – 8) 12 Ca. 3–38 Z-1, Guatemala – 9) Apt. 601, Guatemala (owned by Central American Mission, 3611 Congress Ave, Dallas 19, Texas, US) – **L.P:** St. Dir: D. Rutledge. Dir. Prgr: D. Rutledge, E. Alburez. Dir. Tec: E. Yoder – **D.Prgr:** *Spanish on* 720/5955kc: 12.00–03.00, **English on** 720/9670kc: 03.00–04.00 – **Ann:** E: "These are your Good News Stations, TGN and TGNB" – Sp: "Estas son sus emisoras culturales TGN y TGNA" – V. by QSL-card – **F.Pl:** 10kW.

10) Mazatenango Such – 11) 12 Ave. 26–27 Z-5, Guatemala – **L.P:** Dir: M. T. de la Rosa H – **Ann:** "R. Quetzal la emisora simbolo en Guatemala C.A. 1270kc onda larga, 5980kc onda corta".

12) 6a Ave. 10–45 Z-1, Guatemala – **L.P:** Dir: H. Gonzalez Juarez. Dir. Tec: J. de la Cerda – **Ann:** "Esta es R. Nuevo Mundo con la música mas cervana a su recuerdo" – V. by QSL-card.

13) 5a Ave. 16–38, Z-1, Guatemala – **Ann:** "Con Diez mil watts transmite en Guatemala", R. Sonora, 1390kc onda larga, 6000kc onda corta" – 14) 7a Ave 0–26, Z-1, Quetzaltenango – **L.P:** Dir: M. C. de Rios – **Ann:** "TGD 1070kc onda larga, TGDA 6020kc onda corta, R. La Voz de Occidente en Quetzaltenango, Guatemala" – V. by QSL-card.

15) KM.12 Carretera Roosevelt, Guatemala – **Ann:** "TGTO R. Internacional de Guatemala en 810kc onda larga, 6030kc onda corta, audítorio en toda la República" – **Int-Sig:** Electrical Xylophone – V. by QSL-card.

16) Coatepeque, Quezaltenango – 17) 5a. Ca. 0–26, Z-1, Guatemala – **L.P:** Dir: J. A. Fernandez – **Ann:** "TGXA R. Centro Musical 1040kc".

18) 14 Ave "A" 78, Quezaltenango – **L.P:** Dir. Gen: H. Diaz M. St. Mgr: C. Augusto D – **D.Prgr: N:** 13.00, 18.30, 01.00 – **Ann:** "Esta es R. Cadena Landivar, difundiendo en 1070kc onda media, 6060kc onda corta, banda de 49 metros, frequencia modulada en 96.5Mc en Quezaltenango, República de Guatemala, América Central" – V. by letter, Re. in Sp, E.

19) KM.58 Autopista San José, Escuintla – 20) San Marcos.

21) 2a Ca. 36–89, Z-11, Guatemala.

22) 2a Ave. 13–39, Z-1, Guatemala – 23) Quezaltenango – **L.P:** Dir: M. Mendoza H – **Ann:** "Difunden las estaciones TGQ R. Nacional de Quezaltenango, Guatemala" (followed by 4 xylophone notes) – V. by QSL-card or letter. Records accepted.

24) 7a Ave. 9–34, Z-1, Guatemala – **L.P:** Dir: M. T. Conde – **Ann:** "R. Universal" – V. by QSL-card.

25) 13 Ca. 12–26, Z-1, Guatemala – 26) Ca. 18 de Septiembre 6–72, Z-1, Guatemala. Te: 23318. **Cable:** Tevenac – **L.P:** Dir. Gen: M. M. Hidalgo. Dir. Tec: E. Gomez. Dir. Prgr: J. Alberto Fernandez – **Ann:** "Esta es TGW La Voz de Guatemala" (followed by 3 xylophone notes) – V. by QSL-card. Records accepted – **F.Pl:** 20kW on 1360kc, 10kW on 6180kc, new 10kW tr's on 9760, 15170kc.

27) Florens Peten – 28) 12 Ave. 28–35, Z-5, Guatemala – **L.P:** Dir: R. Contreras – 30) Retalhuleu.

Medium Waves: D.Prgr: 12.00–05.00 Approx.

31) **R. Cino Sesenta,** 8a Ave. 9–23, Z-1, Guatemala.

32) **R. Progreso,** 6a Ave. 10–50, Z-1, Guatemala – 33) **R. Monumental,** Antigua – 34) **La Voz de la Libertad,** 13 Ca. 6–77, Z-1, Guatemala.

35) **R. Tacaná,** 19 Ca. 11–34, Z-1, Guatemala.

36) **R. Sur,** Escuintla – 37) **R. Mundial,** 2a Ave. 6–45, Z-1, Guatemala.

38) **R. Faro Aviateca,** 1a Ca. 6–90, Z-9, Guatemala – 39) **R. Corporacion,** Quezaltenango – 40) **R. Ciro's,** 8a Ca. 2–28, Z-1, Guatemala – **Ann:** "R. Ciros la emisora musical de Guatemala" – **Int-Sig:** Xylophone.

41) **La Voz de la Telefunken,** 4a Ca. 20 Ave, Z-14, Guatemala. **Cable:** Telefunken. **L.P:** Dir: E. Mayorga **L. D.Prgr:** 12.30–05.30. **Ann:** "La Voz de la Telefunken 920kc, Guatemala". V. by letter.

42) **R. Central,** 6a Ave. 1–31, Z-9, Guatemala – 43) **R. Mil,** 6a Ave. 4–61, Z-10, Guatemala – 44) **R. Panamericana,** Carretera Roosevelt, Guatemala.

45) **R. Indiana,** Mazatenango – 46) 7a Ave. 20–20, Z-1, Guatemala.

47) **R. Reloj,** 1a Ave. 8–50, Z-1, Guatemala – 48) **R. Mil Doscientos Diez,** 3a Ave. 13–07, Z-1, Guatemala – 49) **R. Mil Doscientos Diez,** Puerto Barrios – 50) **R. Columbia,** 9a Ave. 13–17, Z-1, Guatemala.

51) **R. Victoria,** Mazatenango – 52) **La Voz de los Mayas,** 9a Ca. 0–02, Z-1, Guatemala – 53) **R. Nacional,** Totonicapan – 54) **R. Tropicana,** Escuintla – 55) **La Voz de la Buena Musical,** 13 Ca. 9–62, Z-1, Guatemala.

56) **R. Cultural de Colomba,** Quezaltenango – 57) **R. Xelajú,** Quezaltenango – 58) **La Voz de la Eterna Primavera,** 8a Ca. 3–18, Z-1, Guatemala – 59) **La Voz de Huehuetenango,** Huehuetenango – 60) **La Voz del Atlántico,** 19 Ave 1–46, Z-6, Guatemala – 61) **R. Circuito TGHU,** Posada Belem, Antigua – 62) **R. Nacional Matias de Galvez,** Pto. Matias de Galvez – 63) **R. Modelo,** Zacapa.

HAITI

L.T: GMT – 5 h – **Pr.L:** French, Creole.

DEPARTEMENT DES TRAVEAUX PUBLICS

Service des Télégraphs, Téléphones & Radios, Port-au-Prince.

STATIONS: All st's comm. exc. 1), 2), 12), 14) (Religious).

Short Waves: Call: --. *=inactive.

Call	kc	m	kW	Name and h of tr.
1) U	2410	124.5	0.25	R. Lumière, Les Cayes
2) SO	2450	122.5	0.25	R.St. 4VEH, Cap Haitien: 10.30–14.00, 17.00–01.30
3) M	4940	60.73	0.5	R. Diffusion Haitienne, Port-au-Prince: 12.00–01.30
4) GS	5020	59.76	0.12	R. Independance, Gonaives: 11.00–14.00, 17.00–20.00, 23.00–02.30
5) GA	*5030	59.64	0.2	R. Capois la Mort, Port-de-Paix:
6) AF	*5090	59.00	0.2	Voix de la Grande-Anse, Jérémie
7) CB	*5740	52.26	0.3	Voix du Sud, Aux Cayes
8) B	5985	50.13	7.5	R. Commerce, Port-au-Prince: 22.00–04.00
9) EB	6015	49.88	0.75	R. Caraibes, Port-au-Prince: 11.00–04.00(Sat/Sun 05.00)
10) CP	6075	49.38	0.15	Voix du Nord, Cap Haitien:
11) HW	6200	48.39	1	R. Haiti, Port-au-Prince: W 11.00–04.00, Sun 13.30–03.00
1) O	6100	49.18	0.25	R. Lumiére, Les Cayes:
12)	*6100	49.18	0.54	Voix de l'Ave Maria, Cap Haitien

2)	E	6120	49.02	2.5	R.St. 4VEH, Cap Haitien: 10.30–14.00, 17.00–01.30
13)	WA	6155	48.74	0.25	R. Citadelle, Cap Haitien: 12.00–15.00
14)	M	*6165	48.66	1	R. Manrèse, Port-au-Prince:
15)	SC	6178	48.55	0.2	R. Saint Marc:
8)	C	9540	31.45	7.5	R. Commerce, Port-au-Prince: 11.00–14.00
1)	O	9635	31.14	0.25	R. Lumière Les Cayes
2)	EH	9770	30.71	0.4	R.St. 4VEH, Cap Haitien: 10.30–14.00, 17.00–01.30
2)	EJ	11835	25.35	2.5	R.St. 4VEH, Cap Haitien: 10.30–14.00, 17.00–01.30

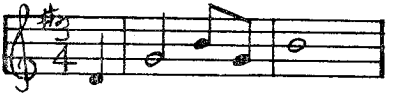
Medium Waves: °=Short Wave. *=inactive. a=not using its off. freq.

Call	kc	kW	Call	kc	kW	Call	kc	kW
1) I	°760	1	2) EF	°1035	10	11) W	°1330	1.5
1) UE	780	0.25	8) A	°1080	1.5	23) S	1385	1
16) NL	860	0.2	21) F	1120	0.2	24) GM	1430	1
17) 2A	a880	0.15	9) AB	°1150	1	10) EA	°1460	0.15
18) CD	960	0.3	22) RD	1170	0.25	25) PE	*1475	0.2
19) CPS	990	0.2	1) IE	1180	0.25	26) A2F	*1530	0.15
20) PW	*1020		3) YM	°1250	0.6			

Short Waves:

1) Les Cayes – **L.P:** Dir: L. A. Markwood. Dir. Tec: D. Hartt – **D.Prgr: French & Creole:** 11.00–14.00, 22.30–03.30. **Spanish** (for Christians in Cuna): 14.00–14.30 – **Int-Sig:** "La Lumière du Monde c'est Jésus-Christ" – **V.** by QSL-card – **Pub:** Prgr.schedule on request. St. silent at present. Destroyed in a hurricane.

2) Box 1, Cap Haitien. **Cable:** Ormiso – **L.P:** Dir. Gen: Dr. E. Erny. Dir. Tec: M. E. Picazo. Dir. Prgr: Miss M. Stockton – **D.Prgr:** On all freq's: 10.30–14.00, 17.00–01.30. **English:** 11.30–14.00, Sun also 19.00–21.00. **N:** 11.15 (Sun), 12.00, 01.00 – **French & Creole:** 17.00–21.00 (W), 23.00–01.30. **N. French:** 17.00, 23.00 – **Spanish:** 10.30–11.30, 21.00–23.00. **N:** 22.00 – **Listener's Post** (Mbg. DX-Prgr): Fri 12.15 to No. America – **Ann:** F: "Ici La Voix Evangelique d'Haiti" or "Ici R. 4VEH". Sp: "Escucha Ud. La Voz Evangelica de las Antillas" or "R. 4VEH". E: "This is the Evangelistic Voice of the West Indies" or "This is R. 4VEH" – **Int-Sig:** Gong.



V. by QSL-card or letter. **Rp.** preferred but not required. **Re.** in E, Sp, F – **Pub:** Prgr.schedule (twice a year) free on request.

3) Ruelle Jeanty, Port-au-Prince – **L.P:** Dir: Y. Michel – **Ann:** "Pour le Rayonnement, de l'Culture et l'Avancement du Peuple Haitien, ici la Radiodiff. Haitienne, Poste 4VYM..".

4) Gonaives – **L.P:** Dir: E. Mitton – **Ann:** "Ici R. Independance, Poste 4VGS à Gonaives, République d'Haiti, Grandes Antilles" – **V.** by QSL-card.

5) Port-de-Paix – **L.P:** Dir. Tec: G. Arthamin – 6) Jérémie – **L.P:** Dir. Tec: A. Félix – 7) Aux Cayes.

8) B.P. 1143, Port-au-Prince. **Cable:** Radioco – **L.P:** Dir. Gen: S. Lassegue. Dir. Tec: A. Brown – **D.Prgr: La Voix de la République d'Haiti:** D 12.00, 19.30, 23.15, 02.30 (rel. by most st's at Port-au-Prince). **N:** Every h on the h at 14.00–22.00, 02.45. **English:** D 11.30–12.00, 01.30–02.00 – **Ann:** "Ici R. Commerce Poste 4VA, et 4VB émettant sur ondes longues avec la fréquence de 1080kc et sur ondes courtes, alternativement dans les bandes de 49 et 31 mètres".

9) 23 Ruelle Chavannes, Port-au-Prince. **Te:** 4115 – **D.Prgr: N:** 13.00, 00.00 – **Ann:** "Ici R. Caraibes, Poste 4VAB et 4VEB émettant sur la bande des 260m 86, et celle des 49m de Port-au-Prince, Capitale de la République d'Haiti, Grandes Antilles" – **V.** by QSL-card or letter. **Rp.**

10) Cap Haitien – **L.P:** Dir. Tec: E. Anacréon – **Ann:** "Ici la Voix du Nord, Poste Comm. de Radiodiff. 4VCP, affiliée à la chaine de la Paix des Nations Unie...".

11) P.O. Box 737, Port-au-Prince – **L.P:** Dir. R. Widmaier. Dir. Tec: H. Widmaier. – **D.Prgr: N:** 11.45, 12.15, 15.00, 17.30, 20.00, 22.45, 02.30. – **Ann:** "Ici R. Haiti, Postes 4VW, 4VRH et 4VWH, à Port-au-Prince. Vous captez R. Haiti, émettant dans les bandes de 230, 49 et 31 mètres a Port-au-Prince. 1330 sur le cadran de votre poste: R. Haiti".

12) Eveché du Cap Haitien, Cap Haitien – **L.P:** Dir. Gen: A. Jamier. Dir. Tec: F. Sénégal – **D.Prgr: N:** 11.30, 23.00 – **Ann:** "Ici la Voix de l'Ave Maria".

13) Cap Haitien – **L.P:** Dir. Tec: S. Wainwright – **Ann:** "Ici R. Citadelle, Poste 4VWA au Cap Haitien, Capitale touristique de la République d'Haiti, Grandes Antilles" – **V.** by QSL-card.

14) P.O. Box 525, Port-au-Prince

15) Rue Louverture 158, St. Marc – **L.P:** Dir. Tec: E. S. Côtes – **V.** by letter.

Medium Waves:

16) **Centre de R.dif. Commerciale,** 889 Blvd. Harry Truman, Martissant, Port-au-Prince.

17) **R. Nationale,** Ave. Jn. J. Dessalines 265, Port-au-Prince. **D.Prgr:** 10.00–04.00(Sun/Mon 05.00) – 18) **R. Carillon,** Rue Dr. Aubry 157, Port-au-Prince. **D.Prgr:** W 11.00–13.00, 17.00–23.00. Sun 14.00–02.00.

19) **R. Cacique,** Rue Traversière 3, Port-au-Prince. **D.Prgr:** W 11.30–14.00, 17.00–03.00, Sun 13.00–18.00. **Ann:** "Pour l'unité de la famille haitienne, vous captez R. Cacique, Poste 4VCPS, émettant avec la fréquence de 990kc, de ses studios situés au numero 3 de la Rue Traversière, à Port-au Prince" – 20) **R. Petionville,** Petionville – 21) **R. Union,** 1 Ruelle Louverture, Port-au-Prince. **D.Prgr:** W 11.30–14.00, 17.00–04.00, Sun 13.00–23.00 – **F.PI:** sw. in 60 & 49 mb. – 22) **R. Tropiques,** Ave. John Brown, Port-au-Prince. **D.Prgr:** 15.00–03.00(Sun 22.00). **Ann:** "Canal Onze Soixante-Dix, Avenue John Brown, (Lalue); le Poste: R. Tropiques" – 23) **R. Port-au-Prince,** Stade Sylvio Cator, Port-au-Prince. **D.Prgr:** 11.00–03.00.

24) **Magloire Broadc. Circuit,** Rue Americaine, Port-au-Prince. **L.P:** Dir: Frank C. Magloire (owner local newspaper "Le Matin"). **D. Prgr:** 11.30–03.00.

25) **La Voix des Antilles,** Rue Capois 68, Port-au-Prince. – 26) **R. Quisqueya,** Rue des Miracles 88, Port-au-Prince. **Ann:** "Au service du commerce, au service des hommes d'affaires et du public en général, ici R. Quisqueya".

HONDURAS (British)

L.T: GMT–6 h – **Pr.L:** English, Spanish.

RADIO BELIZE (Go.)

FI: By state and license fees – **ADDR:** P.O. Box 89, Belize. **Cable:** "Radio". **Te:** 80.

L.P: Dir: E. G. Waight. Chief Eng: L. H. Young.

STATIONS: 834kc 20kW – 3300kc 90.85m 5kW.

HOME SCE: English: 12.30–15.30, 18.00–18.45, 03.00–04.00.

N, Wrp: 13.00, 15.00, 18.30, 01.00, 03.00 – **Spanish:** 18.45–19.00, 22.30–03.00. **N:** 18.45, 00.00.

ANN: English: "This is R. Belize". Spanish: "Esta es R. Belize".

INT-SIG: Opening: "Land of the Gods". Closing: "Land of the Gods" and UK Nat Anthem – **V.** by QSL-card.

HONDURAS (Rep.)

L.T: GMT–6 h – **Pr.L:** Spanish.

DIRECCION GENERAL DE COMUNICACIONES ELECTRICAS – **ADDR:** Edif. Comunicaciones Electricas, Tegucigalpa. **Cable:** Gentel. **Te:** 3210.

STATIONS: All st's comm. exc. 26) (Rlg. Cultural). Call: HR---.

Short Waves:

	Call	kc	m	kW	Name & h of tr.
1)	LC	4775	62.84	1	R. Continental, San Pedro Sula: 13.00–04.00
2)	ST	4790	62.29	0.5	R. Primero de Mayo, Tela: 13.00–04.00
3)	QN3	4905	61.16	0.5	La Voz del Atlantico, Puerto Cortez: 15.00–03.00
4)	US	4930	60.85	1	R. Católica, Tegucigalpa: 11.00–04.00
5)	QW	4995	60.06	0.5	R. Juventud, Tela: 13.00–05.00
6)	NL	5875	51.05	1	La Voz de Honduras, Tegucigalpa: 11.00–05.00
7)	RH5	5960	50.34	1	La Voz de Occidente, Santa Rosa de Copan: 13.00–04.00
8)	VW2	5965	50.28	0.5	La Voz de Centro America, San Pedro Sula: 14.00–05.00
9)	P1	5995	50.04	1	El Eco de Honduras, San Pedro Sula: 13.00–04.00
10)	OW2	6020	49.83	1	R. Monserrat, Tegucigalpa: 12.00–04.00, 11.30–04.00
11)	TL	6035	49.71	1.5	R. Tegucigalpa: 12.00–06.00
12)	LP3	6050	49.59	1	R. America, Tegucigalpa: 13.00–05.00
13)	YN4	6060	49.50	0.3	La Voz del Merendon, San Pedro Sula: 12.00 04.00
14)	MH5	6075	49.38	0.6	La Voz del Junco, Santa Barbara: 12.00–06.00
15)	NQ4	6090	49.26	0.5	R. Morazan, Tegucigalpa: 12.00–04.00
16)	XW2	6110	49.10	0.5	R. Comayagüela: 12.00–04.00
17)	Q4	6125	48.98	1	R. Suyapa, San Pedro Sula: 12.00–05.00
18)	ME2	6135	48.90	0.9	La Voz del Patio, La Cieba: 12.00–06.00
19)	XN4	6145	48.82	0.3	R. Estrella, Tegucigalpa: 12.00–06.00
20)	UC	6155	48.74	1	R. Centro, Tegucigalpa: W 12.00–05.00. Sun 14.00–03.00
21)	TW4	6165	48.66	1	R. & Television, Hondureña, Tegucigalpa: 11.00–06.00
22)	MT4	6185	48.40	0.5	R. Molino Rojo, San Pedro Sula: 12.00–04.00

23) D2 6195 48.43 0.5 La Voz de Atlantida, La Ceiba: 12.00–04.00
4) ZN 9610 31.22 2 La Voz de Suyapa, Tegucigalpa

Medium Waves: Call: HR--. °=Short Wave. [1]=also FM.

21) –	570	1	20) U	°865	10	25) QR4	1320	0.5
21) –	580	1	4) ZN	°890	1	18) ME	°1350	0.5
21) –	590	1	4) VS	°910	1	7) HR	°1370	0.5
12) LP	°610	10	11) TV	°980	1.5	26) VC	1380	1
22) MT	°640	1	19) XN	°1040	1.5	2) ST	°1390	
6) N	°670[1]	10	3) QN	°1150	0.5	9) P	°1400	0.5
21) TV	°715	1.1	16) XW	°1200	0.5	8) PI	1400	1
13) YN	°740	1	17) Q	°1250	1	5) QW	°1420	0.5
15) NQ	°775	10	24) XA	1280	0.3	27) TI	1460	0.5
10) OW	°850	2	8) H6	1300		8) LC	1460	

Short Waves:
1) Sr. L.J. Canahuati, San Pedro Sula – 2) Sindicato de Trabajadores de la Tela R. R. Co, Tela, Atlantida – 3) Barrio "La Curva", Puerto Cortez – 4) Iglecia Católica Nacional, Apt. Postal 480, Tegucigalpa, DC. **Te:** 2440. **L.P:** Mgr: H.A. Meoño M. Dir. Tec: L. Gomez. **D.Prgr: N:** 12.00, 24.00. **Ann:** "R. Internacional, La Voz de Suyapa, Emisora Católica de Honduras" – **V.** by QSL-card. Re. in Sp, E or F.
5) Sr. A. Griffin H, Barrio "El Centro", Tela, Atlantida.
6) Av. Lempira 8a, Ca. 410, Tegucigalpa. **Te:** 20761. **L.P:** Dir. Gen: J. Rafael Ferrari. Dir. Tec: F. Pon Aguilar. **D.Prgr: N:** 12.15, 13.15, 18.05, 18.30, 03.00, 04.30. **Ann:** "Esta es HRN la Voz de Honduras, desde Tegucigalpa, Honduras, Centro America". **V.** by QSL-card. Records accepted. **F.Pl:** Nat. network with st's in 3 cities.
7) Dr. A. Rendón H, Santa Rosa de Copan – 8) Apt. 120, San Pedro Sula – **L.P:** Owner: Jorge J. Sikaffy. Dir. Tec: H. Herman. **MW:** R. El Mundo Continental. **FM:** 89.3Mc. **D.Prgr:** 19 h in Sp, E, Arabic – **Ann:** "HRVW, HRWW". **Int-Sig:** Gong. **V.** by letter.
9) Apt. 24, San Pedro Sula. **Cable:** Radio Sula. **L.P:** Dir. Gen: A.A. Diaz Z. Dir. Tec: L.C. Gomez. **D.Prgr: N:** 17.00, 01.15. **Ann:** "Estas son HRP1 y HRPX El Eco de Honduras, desde San Pedro Sula, Honduras, Ca". **V.** by letter. Re. in Sp, E and F – 10) Tegucigalpa, DC. **Cable:** Monserrat. **Ann:** "HROW, R. Monserrat, la emisora de los hondureñas en Tegucigalpa, Honduras, Centro América". **V.** by QSL-card.
11) E.J. Chahin, Tegucigalpa, DC – 12) Apt. Postal 259, Tegucigalpa. **Te:** 1371. **D.Prgr: N:** 12.00, 18.30, 00.30, 05.30. **Ann:** "Estas és R. América en Tegucigalpa". **V.** by QSL-card – 13) J.J. Romera, San Pedro Sula. **V.** by letter – 14) M.H. Hasbun, Santa Barbara – 15) F.P. Aguilar, P.O. Box 393, Tegucigalpa, DC – 16) H. Andino, Comayagüela. **V.** by QSL-card – 17) Apt. 33, San Pedro Sula. **D.Prgr: N:** 13.00, 18.00, 00.00, 04.00. **Ann:** "HRQ R. Suyapa, San Pedro Sula, Honduras, Centro America". **V.** by QSL-card and letter – 18) Professor G. Irias, La Ceiba, Atlantida. 19) V. Zavala, Tegucigalpa, DC – 20) Apt. Postal 642, Tegucigalpa. **Te:** 3801. **L.P:** Dir. Gen: M. Villeda T. Dir. Tec: F.P. Aguilar. **D.Prgr: N:** 12.00, 13.10, 18.00, 03.00. **Ann:** "Esta es Radiocentro, la emisora del centro de su radio...". **Int-Sig:** four notes on Xylophone. **V.** by letter. **F.Pl:** New st. "R. Exitos".
21) Apt. 734, Tegucigalpa, DC. **L.P:** Dir. Gen: A.D. Lardizabal Mgr: M. Brooks H. Dir. Foreign Rel: E.D. Lardizabal. **Ann:** "Radio-Televisión Hondureña". **V.** by letter. Records accepted – 22) M. Morales, San Pedro Sula – 23) Suc. Ing. M.R. Moncada, La Ceiba, Atlantida.

Medium Waves:
24) **La Voz de Choluteca,** Choluteca – 25) **La Voz del Pueblo,** Tegucigalpa – 26) **La Voz Evangélica de Honduras** ,Apt. 270, Tegucigalpa. **Cable:** Vozevhon. **L.P:** Dir. Gen: D.R. Jones, Dir. Tec: H. Erickson. **D.Prgr:** 12.00–14.00, 23.00–03.00. Rel. VOA: 13.00, 01.00. BBC: 12.15, 23.45. Rlg N: Sun 13.30, 23.30. **Ann:** "Sintonice La Voz Evangélica de Honduras, HRVC, transmitiendo en 1380kc en la Onda Larga, desde Tegucigalpa, capital de La República en Centroamérica. Transmitimos programas culturales y espirituales desde las 6:00 de la mañana hasta las 8:00 y de las 5:00 de la tarde a las 9:00 de la noche para su placer e inspiracion. La hora correcta..." – **V.** by letter. Rp. Records accepted. **F.Pl:** A 1kW sw-tr. to operate on 4820kc by June 1965 – 27) **R. Santa Lucia,** Tegucigalpa – 21) **La Adelanta y sus Satelites** (a radio netw. broadc. simultaneously with st. 21). 570 kc(Tegucigalpa), 580kc(El Socorro), 590kc(San Pedro Sula)+FM 92.1Mc 5kW (Tegucigalpa). Projected: 560kc(Choluteca), 600kc(La Ceiba) both 1kW.

Your help is needed . . .
to make the WRTH even better, and that is why we ask all of our readers—listeners and radio-stations—to send in corrections and new schedules, thus enabling us to offer you an **improved** WRTH 1966 . . .

JAMAICA

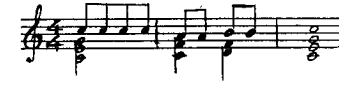
L.T: GMT – 5 h – **Pr.L:** English.

RADIO JAMAICA & REDIFFUSION LTD. (Comm.)

FI: By adv – **AD:** 12 mins. per h – **ADDR:** 32 Lyndhurst Rd, Cross Rd, Kingston 5. **Cable:** Broadco – **Te:** 68151 – **L.P:** Gen. Mgr: Graham Binns, MA. Dir. Prgr: J. Colley. Eng. in charge: W. G. Matthews.
STATIONS: Mandeville 770kc 5kW – Point Galina 580kc 5kW Kingston 720kc 5kW – Montego Bay 550kc 5kW
FM: Kingston 94.6Mc 1kW, 91.9Mc 0.03kW, Christiana 90.6Mc 0.85kW.
HOME SCE. in English: 09.45–05.00 (Sat 06.00) – **N:** 10.30, 11.00, 12.00, 12.30, 13.00, 13.10, 15.00, 17.00, 18.00, 19.00, 22.00, 22.30, 23.00, 24.00, 02.00, 02.10, 04.30 – Imminent Hurricane warnings on the h every h of tr.
ANN: "This is R. Jamaica and Rediffusion" – **V.** by QSL-card.

JAMAICA BROADCASTING CORPORATION (Comm. and Public Service)

FI: By adv. and Go. aid – **AD:** Max. 12 min. per h – **ADDR:** 5 South Odeon Ave, Kingston. **Cable:** Jarad. **Te:** 65621 – **L.P:** Gen. Mgr: V. H. Ennever. Asst. Gen. Mgr: F. M. Needham. Dir. Tec: M. Hately.
STATIONS: Kingston 560kc 5kW – Spur Tree 620kc 5kW Montego Bay 700kc 5kW – Point Galina 750kc 5kW
FM: Kingston 96.3Mc 1.2kW – Half Way Tree 99.9Mc 0.08kW – Christiana 91.1Mc 1.2kW.
HOME SCE: 09.45–05.00. **N:** 11.00, 12.00, 12.30, 13.00*, 13.10, 15.30, 17.30, 18.30, 21.30, 22.30, 23.00*, 00.30, 02.30, 04.00 (*=BBC) – **Wrp:** W: 11.30, 12.40, 17.35, 23.32, 04.02.
ANN: "This is the Jamaica Broadc. Corporation" – "This is JBC Radio" – **INT-SIG:** Vibraphone: Chi Chi Bud (Jamaican folksong)



V. by QSL-card, Rp – **PUB:** "JBC TV & Radio Guide" (monthly).

LEEWARD ISLANDS

L.T: GMT – 4 h – **Pr.L:** English.

Montserrat

RADIO MONTSERRAT (Go.)

ADDR: P.O. Box 51, Plymouth, Montserrat. **Te:** C 76. **Cable:** "Radmon" – **L.P:** Gen.Mgr: C. Osborne. Prgr. Mgr: V. Browne. Dir. Tec: F.J. Day.
STATION: 885kc 0.25kW.
HOME SCE. in English: W 10.00–12.00, 15.30–16.45, 22.30–02.00, Sun 20.30–23.45 – **ANN:** "This is R. Montserrat 885kc broadc. from Grover Botanical Gardens in Plymouth" – **V.** by letter. Records accepted.

ANTILLES RADIO CORPORATION (Priv, Comm).

ADDR: Direction: P.O. Box 35, River Field, Montserrat, W.I. **L.P:** Chmn: E. Gifford. Dir: J. Lawton. Dir. Tec: A. Zimmerman. Dir. Adm: D. Apperley. Dir. Artistical Dept: H. Apperley. Dir. Ext. Dept: M. Niquet.
STATIONS (R. Antilles, System: Brown Boveri):
926kc 324m 200kW – 740kc 406m 20kW.
HOME SCE: 10.00–04.00 in English, French, Spanish, Portuguese.
ANN: "Ici R. Antilles" and "Ici R. Interamerica".
INT-SIG: Low gong.
Publicity Offices abroad: "RAPRO" Obispo Catala 42, Barcelone 17 (Spain), PUBLI ONDES, 28 Blvd Haussmann, Paris 9° (France), ROSS RADIO PRODUCTIONS LTD. 25 Upper Wimpole Street, London S.W.1. (England), PUBLI ONDES INTERNATIONAL, rue Henri IV, P.O. Box 325, Pointe-à-Pitre (Guadeloupe).

Antigua

ANTIGUA BROADCASTING SERVICE (Go.)

ADDR: St. Johns, Antigua – **L.P:** Mgr: E. A. M. John.
STATION: 644kc 0.5kW – **HOME SCE. in English:** W 10.30–12.00, 16.00–18.00. Sun 10.00–12.00, 20.00–02.30.

St. Kitts

RADIO ZIZ (Go.)

ADDR: Springfield, Basseteire, St. Kitts – **L.P:** Mgr: K. Osborne.
STATION: ZIZ 570kc 0.66kW – **HOME SCE. in English:** 10.45–14.00, 22.00–02.00, N: 11.00, 23.00, 23.30 – **ANN:** "This is R. Station ZIZ" – **V.** by letter. Records accepted.

The Marconi Company Ltd, G.B, delivered 660kW mw-tr.

324 m 200 Kw **Radio Antilles** 406 m 20 Kw

"Antilles - Radio - Corporation"
P. O. BOX 35
RIVERFIELD - ILE DE MONTSERRAT
(West Indies)

MARTINIQUE (French West Indies)

L.T: GMT–4 h – Pr.L: French.

ANTILLES-GUYANE NETWORK (Office de R. dif. Télévision Française).
ADDR: Clairiere, Fort de France. Te: 6060 –
STATIONS (Systems: Thomson-Houston, TRT):
1500kc 200.0m 50kW 4895kc 61.29m 4kW
3315 - 90.50– 4 – 5994 – 50.04– 4 –
HOME SCE: 10.15–02.30 on 1500kc; 10.15–12.00, 20.00–02.30 on 3315kc; 12.00–20.00 on 5995kc; 12.00–23.00 on 4895kc. N: 10.30, 11.30, 13.00, 14.00, 15.30, 16.30, 17.00, 17.30, 19.00, 20.00, 22.00, 23.00, 23.30, 02.20 –
ANN: "Ici Radiodiff. Française Antilles-Guyane" – INT-SIG: First eight notes of "Adieu Foulards, Adieu Madras" on piano.

V. by letter.

MEXICO

L.T: GMT–6 h (Mexico generally), GMT–7 h (Sonora, Sinaloa, Navarit and Lower Calif), GMT–8 h (Upper Calif) – Pr.L: Spanish.

DIRECCION GENERAL DE TELECOMUNICACIONES, *Departamento de Radiodifusion* – ADDR: Col. Narvarte, México, DF.
STATIONS: All st's comm. exc. 2), 3), 7), 66), 20), 14), (XEAD only), 87), 111), 117) (XEJM only), 221) (Cultural).

Short Waves: Call: XE...*=inactive.

	Call	kc	m	kW	Name and h of tr.
1)	VJ	2160	139.39	0.25	R. Dif. XEVJ, Chilpancingo
2)	SE	2380	126.0	0.35	Sria. de Educación Pública, México
3)	JG	4820	62.24	0.2	Emis. Casa de la Cultura, Guadalajara: Mon 04.00–05.00
4)	UMT	5960	50.34	0.25	Universidad Iberoamericana, Mexico
5)	OI	6010	49.92	2.5	R. Mil, México: 12.00–07.00
6)	UW	6020	49.88	0.25	El Eco de Sotavento, Vera Cruz: 11.30–06.00
7)	XQOC	6045	49.63	0.25	R. Universidad Potosina, San Luis Potosi: 17.00–06.00(Sun 14.00–02.00)
8)	XG	6065	49.46	1	R. Dif. México, México: 12.00–06.00
9)	CMT	6090	49.26	1	R. Dif. XECM/XECMT, Ci. Mante: 13.00–03.00
10)	QM	6105	49.14	0.25	Sistema R. Yucatan, Mérida: 13.00–06.00
11)	UDS	6115	49.06	1	R. Universidad de Sonora, Hermosillo: 17.00–05.00
12)	TS	6120	49.02	0.5	R. XETS, Tapachula, Chis.
13)	RCM*	6130	48.94	0.1	R. Central de México, México
14)	RUU	6140	48.86	0.25	R. Universidad de Chihuahua
15)	WW	6165	48.66	10	La Voz de la América Latina, México: 11.00–05.00 (Mon 05.15)
16)	XA	*6175	48.58	0.1	R. Gobernación, México
17)	IOM	6185	48.50	1	Instituto Federal de Capacitación, México
15)	WW	9515	31.53	10	La Voz de la América Latina, México: 11.00–05.00(Mon 05.15)
18)	FT	9545	31.43	0.25	La Voz de Veracruz, Vera Cruz: 11.30–06.00
19)	QK	9555	31.40	0.5	La Hora Exacta, México: 13.00–06.00
20)	YU	9600	31.25	0.25	Universidad Nac. de México (irr)
21)	QQ	*9680	30.99	1	R. Dif. XEQ/XEQQ, México
22)	BR	*11820	25.38	0.15	El Heraldo de Sonora, Hermosillo
23)	HH	11880	25.25	5	R. Dif. Comerciales, México: 12.00–06.00
23)	RR	15110	19.85	5	R. Dif. Comerciales, México: 12.00–06.00
15)	WW	15160	19.79	10	La Voz de la América Latina, México: 11.00–05.00(Mon 05.15)
24)	SC	15200	19.74	5	R. Dif. XEMC/XESC, México: irr.

Medium Waves: Call: XE—. °=Short Wave.
[1]=*also FM.* [2]=*relay st.* [3]=*time signal st.* D=*Daytime operation* only(12.30-02.00 approx.) a)=Belongs to RCN. Stations printed in fat type are in México City.

Call	kc	kW	Call	kc	kW	Call	kc	kW
12) WA	540[2]	150	29) BJB	570[15]/0.25		35) AV	580[15]/1	
12) WA	540[2]	0.5	30) LQ	570	1	36) DZ	580	1/0.45
25) KL	550	1/0.25	31) NZ	570	1/0.25	37) FI	580	5/0.25
26) QW	a550	2/0.2	32) OA	a570	5/0.25	38) HP	580	1/0.15
27) UC	550	1/0.25	33) TJ	570	1/0.1	39) MU	580[15]	/0.25
28) BJ	a570	1	34) VX	570	1/0.25	40) UE	a580	1/0.1
41) E	590	1/0.15	112) OZ	960	1/0.25	182) SW	1300	1D
42) FD	590	5/0.25	113) IQ	a960	1/0.5	183) XW	1300	1/0.1
43) HQ	590	1/0.5	114) ROO	960	1/0.5	184) AM	1310[1]	/0.25
5) PH	590	5	115) VM	960	5D	185) BP	1310	5/0.25
44) BB	a600	5/1	116) J	a970	10/5	186) FH	1310	1D
45) DN	600[1]	1	117) O	a970[1]		187) HV	1310[1]	
46) Z	a600	2	118) CJ	970	5/0.25	188) PO	a1310	1/0.25
47) BX	610[15]	/0.5	119) MH	970	1/0.1	189) VI	1310	1/0.5
48) CV	a610	1/0.25	21) DF	970	10/5D	14) RU	°1310	1/0.25
49) EL	610	1D	120) OW	970	1/0.25	132) TIA	1310	1/0.25
50) GS	610	1/0.5	34) VT	970	5/0.4	69) AI	1320	10/1
51) JA	610	1/0.5	121) UG	970	0.5D	190) RJ	a1320	[1]/0.5
52) KZ	a610	1/0.5	122) KE	980	1/0.25	191) BO	1330	1D
53) UF	610	5/1	123) LC	980	5/0.2	192) FC	1330	1
54) BU	620	5/0.25	124) NR	a980	5/0.5	193) RP	1330[1]	/0.1
55) CK	620	1/0.1	125) TU	980	10/1	194) WQ	1330	1D
56) NK	620	10/5	126) XT	a980	1	195) CW	1340	1/0.2
57) OO	620	1/0.25	127) T	990	[1]50d	196) JK	1340	1/0.25
58) FB	630	5/1d	128) BC	990	1/0.1	197) DKT	1340	1/0.25
59) FU	630	2/0.75	129) CL	a990	5	29) NV	1340[1]	/0.25
3) JB	°630[1]	0.5	130) HZ	990	1/0.25	198) OS	a1340	1
60) TK	630	1/0.25	131) FV	1000	1D	199) OM	1340	1/0.25
12) TS	°630	1/0.5	5) OY	°1000	[1]10	19) QK	1350[3]	1
61) ZM	650	5	132) HL	1010	10/5	200) TB	1350	5/0.5
62) Z	660	2	133) DX	a1010	1	201) Y	1360	1/0.17
63) FJ	680	1/0.1	134) TX	1010	1/0.25	202) KF	1360	1/0.5
64) KQ	a680	5/0.5	135) VK	1010	5/0.1	203) SA	1360	1/0.5
65) LG	680	10/5	136) WS	1010	5/0.25	204) A	1370	1
66) N	690[1]	20	137) XL	1020	1D	205) HF	1370	5
67) TRA	690	50D	69) QR	1030[1]	10/1	206) HX	1370	10/5D
68) AR	700	1D	138) D	1050	10	207) PA	1370	5/0.25
28) BL	710[15]	/0.25	139) G	a1050	100	208) XL	1370	10/0.1
69) MP	710	1/0.5	16) DP	°1060	50d	5) CO	1380	5
70) ON	710	2/1	140) GY	1070	1/0.25	209) GW	1380	1/0.15
71) RL	710	1/0.25	141) IT	1070	1/0.25	210) RK	1380	1/0.5
8) X	°730[21]	50	142) SP	1070	5/0.5	211) M	1390	1/0.5
72) ZZ	760	5D	143) OD	a1090[1]	1D	212) OR	a1390	1
73) ABC	760	10	144) RB	1090	50d	213) SP	1390	5/0.15
74) BI	790	1/0.25	145) WL	1090	2.5D	214) TL	1390	5
75) FE	790	1/0.5	146) OQ	1110	1D	215) GD	1400	1/0.1
76) GZ	790	1/0.25	15) RCNa	°1110	[1]50d	216) I	1400	1/0.25
77) NT	790	5/0.75	147) TR	1120	1D	217) JL	1400	1/0.25
69) RC	790[15]	/1	115) MR	1140	[1]50	218) TO	1400	[1]/0.25
78) SU	790	[1]D	102) AD	1150	[1]0.5/0.125	219) AB	a1400	1
79) VA	a790	5/0.2	148) BF	1150	1/0.25	220) TY	1400	1/0.25
80) MM	Ma800	1	149) GE	a1150	[1]D	221) XB	1400	0.5/0.25
81) AN	800	1D	69) JP	1150	[1]0d	222) AS	1410	1/0.25
82) LO	800	150	150) JS	1150	1/0.5	5) BS	1410	[5]/1
83) FW	a810	50/30D	151) XZ	a1150	1/0.2	223) CF	1410	1/0.5
84) UX	810	5D	152) GR	1160	1D	224) XJ	1410	1/0.5
85) BA	a820	1	153) RT	1170	5D	225) F	1420	[5]/0.5
86) SB	820	0.75	154) FR	1180	1/0.25	58) H	1420	1
87) LA	830	[1]0/5D	155) PZ	1190	1D	226) EW	1420	1D
88) FG	840	1D	15) WK	1190	[2]50/10	227) H	a1420	[5]/0.15
11) US	°850	1	156) ZI	1200	1D	228) RPC	1420	5/0.15
89) TQ	850	10D	21) B	°1220	100	229) WE	1420	5/0.17
90) M	a850	5	157) S	1240	1/0.25	230) WJ	1420	1/0.25
91) ZR	a850	1D	158) BN	1240	1/0.25	231) XX	1420	2
68) MIA	850	1D	159) BQ	a1240	1/0.25	232) CZ	1430	1
92) RA	850	1/0.25	160) LD	1240	1/0.1	233) IG	1430	1/0.1
93) AL	860	1D	10) MQ	°1240	1/0.25	234) LL	1430	1/0.25
94) DU	a860	1/0.5	161) RZ	1240	1/0.25	235) LY	1430	1D
95) MO	860	5	162) DK	1250	5/1	236) OX	1430[15]	/0.5
96) NW	860	1/0.25	163) DL	a1250	[1]/0.5	237) WD	a1430	2/0.15
20) UN	°860[15]		164) JX	1250	1/0.1	69) LZ	1440	5/1
97) MM	a870	1	165) PI	1250	1/0.1	9) CM	a1450	1/0.25
98) EM	880	1D	166) SJ	1250	1/0.5	238) XD	a1450	1
15) W	°900	[1]250	18) TF	°1250	0.5	239) JD	1450	1/0.25
15) WB	900	[2]50	167) L	1260	10/1	240) NA	1450	1/0.5
99) HO	910	[1]1/0.25	168) R	1260	1/0.25	241) PP	1450	1/0.25
6) U	°920	[1]1/0.25	169) MF	1260	1/0.25	242) VH	1450	[1]/0.25
22) BH	°920	[5]/1	170) OG	1260	1/0.15	236) HX	1460	1/0.25
100) BM	920	5/1	171) AX	1270	[5]/0.5	243) JT	1460	1D
101) CQ	a920	1/0.1	172) MW	1270	1D	244) LX	1460	10D
102) MJ	920	1/0.25	10) MH	1270	1/0.5	7) XQ	°1460	0.25
103) OK	920	[2]1/0.25	173) PV	1270	1/0.25	245) YC	1460	1
104) QD	920	1D	174) ZU	1270	1/0.25	246) AU	1470	[5]
21) Q	°940	50	175) AG	1280	1	195) CU	1470	0.25
105) WV	940	1D	176) AW	1280	5/0.5	247) DS	1470	1/0.2
106) GM	950	3/2.5d	177) BW	1280	1/0.6	248) HI	1470	1/0.25
107) YJ	950	1/0.1	178) GJ	1280	[3]0.5/0.25	249) SM	1470	10/5
108) K	a960	5/1	179) AP	1290	1/0.1	250) HM	1480	1D
109) CS	960	1/0.2	19) DA	1290	10/1	251) PR	1480	10/0.5
110) GB	960	1/0.5	180) IG	a1300	1	252) NJ	1480	1/0.5
111) HK	960	1/0.25	181) LE	1300	1D	253) DR	1490	1/0.25

Call	kc	kW	Call	kc	kW	Call	kc	kW
254) ED	1490	1/0.25	259) BG a	1550	1	268) QL a	1580	1/0.2
255) FF	1490	1/0.25	260) JJ	1550	10	236) NH	1590	1/0.2
256) GT	1490	1/0.25	261) NU	1550	5D	**24) VOZ°**	**1590**	**10/5**
257) RO a	1490	1	262) RMK	1560	1/0.5	269) BZ a	1590	1D
23) RH °	**1500**	**20D**	263) RX	1560	1/0.25	270) KB	1590	1/0.125
132) GD	1520	1D	264) RF	1570	250	271) AE a	1600	1
258) SD	1530	1D	265) DM	1580	50	272) NY	1600	1D
5) UR	**1530**	**5**	266) LI a	1580	1/0.25			
201) NC	1540	1/0.25	267) NQ	1580	1/0.5			

+134 stations less 1kW not mentioned.

PRINCIPAL BROADCASTING NETWORKS

A) Radio Programas de México (With 80 Affiliated st's) – **Addr:** Bucareli 109,4° piso, México, DF – **L.P:** Pres: C. Serna Martínez. Gen. Mgr: C. Serna Alvear. Dir. Tec: S. Pang B. Dir. Prgr: H.G. Rivera. **Owned and operated st's:** XEX, México City (with all sw, FM and rel. st's); XERPM 660kc, México City; XEDK 1250kc, Guadalajara, Jal; XEMR 1140kc, XENL 860kc, XENJ 1480kc Monterrey, NL; XER 1260kc Linares, NL; XEVM 960kc Montemorelos, NL.

B) Radio Cadena Nacional (with 65 affiliated st's) – **Addr:** Vallarta 1,6° piso, México, DF. **Te:** 469648 – **L.P:** Dir. Gen: R. Cutberto Navarro. Dir. Tec: M. Huerta – **Key st:** XERCN 1110kc, México City. Other st's: XEACM 1110kc, Campeche, XELEO 1110kc León – **D.Prgr:** All st's 12.00–06.00 – **V.** by QSL-card.

The Mexican Go. requires all st's to carry "La Hora Nacional del Gobierno Méxicano" every Mon 04.00–05.00.

Short Waves:

1) Dirección General de Educación del Estado Chilpancingo, Guerrero.

2) Sria de Educación Pública, Dirección de Asuntos Indigenas, Sección Administrativa, México DF (tr. at Semachique, Chih.)

3) Gobierno del Estado de Jalisco, Casa de la Cultura, Guadalajara, Jal – **D.Prgr:** Mon 04.00–05.00 on all fq's. **FM:** 96.3Mc 0.3kW.

4) Zaragoza 84, México, DF (Tr. at Sisoguichi, Chih)

5) Insurgentes Sur 1870, México, DF – **L.P:** Dir. Gen: Lic. G. Salas G. **Mgr:** F. Ibarra L – **D.Prgr:** mw 24 h. **N:** Every h on the h and 13.30, 14.30 – **Ann:** "R. Mil, en los mil kc de su radio con música a su gusto". – XEPH 1380kc: 13.00–06.00, English 13.30–14.30(W), 01.30–03.15(D exc. Sun & Mon), French 04.15–04.45(Tues, Thurs, Sat), German 00.15–01.00(Sat), Italian 03.15–04.15(Tues, Sat) – R. 590 (XEPH): 13.00–07.00 – **FM:** XEOY-FM 100.9Mc 1kW – **V.** by QSL-card or letter.

6) Av. Independencia 230, Veracruz, Ver – **L.P:** Dir. Gen: Dir. Tec: F. Pazos S – **Ann:** El Eco de Sotavento desde Veracruz" – **V.** by letter. **Re.** in Sp.

7) Apt. Postal 456, San Luis Potosi. **Te:** 52-52 – **L.P:** Dir. Gen: C. Martinez Bravo. Dir. Tec: J. Lomeli Saldivar – **D.Prgr:** W 16.00–05.00, Sun 13.00–01.00. **English Lessons:** W 17.40, 23.40 – **Ann:** "Escucha Vd. a **R.** Universidad XEXQ 1460kc y XEQOC 6045kc en la ciudad de San Luis Potosí, República Mexicana".

V. by letter. Records accepted.

8) Rio de la Loza 196, México, DF – **L.P:** Dir. Gen: M. O'Farrill. Dir. Tec: Ing. F. Solis – XEX rel. st's (all on 730kc): León (Gto) 100/50kW, Veracruz (Ver) 1kW and 5 st's of 0.5kW at Monterrey (NL), Saltillo (Coah), Torreon (Coah), Guadalajara (Jal), San Luis Potosi (SLP) – **D.Prgr:** 12.00–06.00. **N:** 12.30, 12.55, 20.30, 05.00, 05.55; W 14.00, 17.00; Thurs–Sun 00.30, 01.00; Thurs-Sat 04.15; also every 15 min (short bulletins) –**Ann:** "Desde México, XEX en el 730 de su radio, canal internacional y sus estaciones en León, Veracruz, Monterrey, Saltillo, Torreon, Guadalajara y San Luis Potosi" – **FM:** XEX 101.7, 105.1, 106.1Mc (México City) 102.8Mc (Cerro del Samorano) – **V.** by QSL-card or letter.

9) Apt. Postal 79, Ci. Mante, Tams – **L.P:** Dir. Gen: R. Lopez Mendez. Dir. Tec: L. Fernandez C – **N:** 21.00 – **Ann:** "Escuchan ustedes a XECM onda larga y XECMT onda corta, operando por una vida mejor en el campo de México transmitiendo simultaneamente desde Ciudad Mante, Tamaulipas, México" – **V.** by letter.

10) Apt. Postal 217, Merida, Yuc – **L.P:** Dir. Gen: **R.** Domínguez L. Dir. Tec: H. Padron M – **N:** Every h on the h – **V.** by letter – XEMH: R. Merida, Ca. 58 No. 493, Merida Yuc.

11) Universidad de Sonora, Hermosillo, Son. **Te:** 36950 – **L.P:** Dir. Gen: Ing. M. R. Canale. Dir. Prgrs: H. Estavillo M – **Ann:** Sp: "Esta es R. Universidad de Sonora, transmitiendo a través de sus estaciones XEUS y XEUDS desde la Universidad de Sonora, en Hermosillo, Sonora, México" E. "This is R. University of Sonora, broadc. on 850 and 6115kc through this st's XEUS and XEUDS from the campus of the University of Sonora, at the city of Hermosillo, State of Sonora, Republic of Mexico" – **V.** by QSL-card. Records accepted – **F.Pl:** new relay st's at Navajoa (Son), Santa Aua (Son).

12) Av. Norte, Tapachula, Chis.

13) Apt. Postal 7892, México, DF – **L.P:** Dir. Gen: R. Cutberto Navarro. Mgr: E. Nassar Jr. Dir. Tec: E. Diaz G – **D.Prgr:** 11.00–06.00. **N:** every 5 min. before the h – **Ann:** "Aqui México... XERCN, Estación Piloto de R. Cadena Nacional..." – **V.** by letter.

14) Domicilio Conocido, Chihuahua, Chih.

15) Cadena Radiodif. Mexicana, S.A, Ayuntamiento 54, México, DF – **L.P:** Dir. Gen: B. Sancristóbal. Dir. Tec: J. Zepeda – **D.Prgr:** XEW: 12.00–05.45. Rel. tr's: XEWW (sw) XEWA San Luis Potosi, XEWB Veracruz, XEWK Guadalajara, XEWA Monterrey – **N:** 12.25, 12.30, 12.55, 14.00(W), 14.45, 17.00(W), 18.30, 20.30, 21.05, 00.30, 00.00 (exc. Mon), 01.15, 01.40, 04.15(not Sun, Mon), 04.45, 04.55, 05.00, 05.05, 05.25, 05.30, 05.55. **Comm:** 14.50, 20.40, 21.15, 21.25, 01.10, 05.20 – **Sport N:** 14.10, 01.50, 04.40, 05.15 – **Ann:** "XEW y XEWW, La Voz de la América Latina desde México" – **FM:** 90.7Mc 3kW.

16) Ca. de Bucareli, México, DF (inactive both sw and mw).

17) Instituto Federal de Capacitación del Magisterio, Dr. Jimenez 244, México, DF.

18) Apt. Postal 74, Veracruz, Ver. **Te:** 2-22-50 – **L.P:** Dir. Gen: J. de Dios Rodriguez D. Dir. Tec: L. Martinez – **N:** 13.15, 14.55, 03.15 and 5 min. before each h to 05.55 – **Ann:** "La Voz de Veracruz" – **V.** by QSL-card.

19) Tiber 100, 9° piso, México, DF. **Te:** 110814 – **L.P:** Dir. Gen: G. Morales B. Dir. Tec: F. Gomez B – **D.Prgr:** mw 24 h – **Ann:** "XEQK y XETT, la unica hora exacta del Observatorio Nacional de Tacubaya" – **V.** by letter. **Re.** in Sp, E, G, F. Records accepted.

20) Oficinas Técnicas, Ci. Universitaria, Mexico 20, DF. **Te:** 281157 – **N:** 20.00, 05.00 – **Ann:** "Esta es R. Universitaria Nacional de México transmitiendo simultaneamente en sus frecuencias de 860kc de onda larga, 9600kc de onda corta, Banda Internacional de 31.25m, y 96.1Mc de FM, desde sus estudios en la Ciudad Universitaria de la capital mexicana" – **V.** by letter.

21) Dr. Rio de la Loza 182, 2° piso, México, DF. **Te:** 18-52-00 – **D.Prgr:** XEB (mw): 24 h. XEQ/XEDF (mw): 12.00–06.00. **N:** Every h on the h; on XEQ special music and news prgr. at 05.00–06.00 – **Ann:** On XEB: "En el 1220 de su radio, esta es XEB" or "Desde México, XEB en el 1220 de su radio, canal libre internacional". On XEQ: "XEQ desde México" – **V.** by QSL-card or letter.

22) P.O. Box 68, Hermosillo, Son – **L.P:** J. R. Agraz N – **N:** Every h on the h – **Ann:** "XEBH, El Heraldo de Sonora desde Hermosillo" – **V.** by letter – **FM:** 90.2Mc.

23) A.R.S.E. S.A, Quemada 40, Col. Narvarte, México, DF – **N:** 13.31, 20.45, 00.15, 04.00.

24) Independencia 59, esq. con Luis Moya, México, DF.

Medium Waves:

25) **R. XEKL,** Zamora 12, Jalapa, Ver – 26) **R. Mexicana de Mérida,** Ca. 64, No 526, Mérida, Yuc – 27) **R. XEUC,** Barrio de Vixhama, Tehuantepec Oax – 28) **R. Dif. XEBJ,** Hidalgo 19, Tehuantepec, Oax. 29) **R. Fiesta (XEBJB) & R. Alegría (XENV),** Ave. Madero Ote. 1114 2° piso, Monterrey, NL – **D.Prgr:** 12.00–08.00. **N:** every half h – **FM:** XENV-FM: 90Mc 0.05kW, XEJB-FM: 96.5Mc 0.25kW.

30) **R. XELQ,** Morelos Nte 68, Morelia, Mich – 31) **R. Impulsora de Culiacan,** Blvd. 50, Oriente, Culiacan, Sin – **FM:** XEBI 88.2Mc.

32) **R. Oaxaca,** Carlos Bustamente 17, Oaxaca – 33) **R. XETJ,** Av. Lerdo de Tejada 1564, Torreón, Coah – 34) **R. XEVT/XEVX:** XEVT, Zaragoza Sur 3, Villahermosa, Tabasco; XEVX: Morelos 58, Comalcalco, Tabasco.

35) **R. Guadalajara,** Av. Vallarta 1458, Guadalajara, Jal. **Te:** 4-73-31 – **L.P:** Dir. Gen: M. López Diaz. Dir. Tec: G. Jimenez M – **D.Prgr:** 12.00–08.00 (Spanish/English) – **Ann:** "XEAV, R. Guadalajara canal 58" – **V.** by QSL-card or letter – **FM:** 100.3Mc 1kW – 36) **R. XEDZ,** Av. 3 No. 551, Cordoba, Ver – 37) **Pregonero del Edo de Chihuahua,** Libertad 1302, Chihuahua – 38) **R. XEPH,** Ca. 14 No. 150, Ci. Victoria, Tams – 39) **R. XEMU,** Carranza 3, Piedras Negra, Coah – **FM:** 88.4Mc.

40) **La Voz de Chiapas,** Ca. Central 5, Tuxtla Gutiérez, Chis – 41) **R. XEE,** 20 de Noviembre 122, Pte. Durango, Dgo – 42) **R. XEFD,** Carretera a Matamoros, Rio Bravo, Tams – 43) **R. Hermosillo,** Rosales y Vildesolda, Hermosillo, Son – 44) **R. Acapulco,** Morelos 3, Acapulco, Gro.

45) **R. Dif. del Norte,** Av. Juárez 1465, Pte. Torreón, Coah – **FM:** 88.1Mc.

46) **R. XEZ,** Mérida, Yuc – 47) **R. Coahuila,** Av. Carranza 168, Sabinas, Coah – **FM:** 88.2Mc – 48) **R. XEXV,** Francisco I, Madero 35, Ci. Valles, S.L.P – 49) **R. Dif. XEEL,** Teodoro Larrey 4, Fresnillo, Zacatecas.

50) **R. Guasave,** Zaragosa 45, Altoa, Guasave, Sin – 51) **R. XEJA,** Pasaje Tanos, Ca. Enriques, Jalapa, Ver – 52) **La Voz del Istmo Tehuantepec,** Domicilio Conocido, Tehuantepec, Oax – 53) **R. XEUF,** Portal Carillo 8, Edif. Silva, Uruapan, Mich – 54) **R. XEBU,** Ojinaga 118, Chihuahua, Chih.

55) **R. Dif. XECK,** 20 de Noviembre y Victoria, Durango, Dgo.

56) **R. 620,** Balderas 32, México, DF. **L.P:** Dir. Gen: V. Blanco R. Dir. Tec: J. Durand. **D.Prgr:** 13.00–06.00. **Ann:** "R. Seis Veinte Emisora de la Juventud" – 57) **R. XEOO,** Lerdo 197, Pte. Tepic, Nayarit – 58) **Emis. Incorporadas de Monterrey,** 5 de Mayo Ote. 112.

Monterrey. **D.Prgr:** 12.00–16.00. **N:** Every half h. **FM:** 93.2Mc 3kW, 59) **R. XEFU,** Hidalgo 36, Cosamaloapan, Ver.
60) **R. Emid. de Occidente,** Av. Angel Flores 42, Mazatlán, Sin.
61) **La Voz del Comercio de Zamora,** 5 de Mayo, Zamora, Mich.
62) **La Voz de la Peninsula,** Ca. 56 No. 508, Merida, Yuc – 63) **R. XEFJ,** Benito Juárez 86, Teziutlan, Pue – 64) **R. Soconusco,** Parque Infantil, Tapachula, Chipas – 65) **R. Impulsora del Centro,** Paseo de los Insurgentes 1, León, Gto – 66) **R. XEN,** Zacatecas 219, Condom, Yucatan, México, DF – 67) **R. del Pacifico,** Esq. Lerma y Bravo, Tijuana – 68) **R. XEAR** (Zapopan) & **XEMIA** (Chalapa), Ave. Colon 115, Guadalajara, Jal. **D.Prgr: N:** every half h.
69) Articulo 123, No. 90, México, DF. **XERC:** R. Popular de México. **XEQR:** Corporación Mexicana de Radio. **XEPJ:** R. América. **XEAI:** R. Aeropuerto. **D.Prgr:** 12.30–08.30. **N:** every h on the h. **FM:** 88.8Mc (XEPJ), 97.7Mc (XERC), 107.3Mc (XEQR).
70) **R. XEON,** Av. Norte 2, Tuxtla, Gutierréz, Chis – 71) **La Voz Costena desde Colima,** 27 de Septiembre 328, Colima. **L.P:** Dir: R. Vasquez Vda. de Levy. Dir. Tec: A. Vasquez S. **D.Prgr:** 11.00–06.00. **V.** by letter. Rp – 72) **R. XEZZ,** Av. Juárez 595-2, Guadalajara.
73) **R.fónica de México, S.A,** Plaza de los Ferrocarriles 5, México, DF. **Te:** 35-67-67.
74) **R. XEBI,** Madero 310, Aguascalientes, Ags – 75) **R. XEFE,** Aldana 2611, Nuevo Laredo, Tams – 76) **R. XEGZ,** Apt. Postal 6, Ci. Lerdo, Dgo – 77) **R. XENT,** Apt. 105, Col. del Sol, La Paz, BC.
78) **R. XESU,** Av. Zacotocas y Morelia, Mexicali, BC. **FM:** 88.1Mc.
79) **R. Tabasco,** Av. Pino Suarez 24A, Villahermosa, Tab.
80) **R. XEMMM,** Tijuana, BC – 81) **R. Ocotlan,** Madero 42, Ocotlán, Jal – 82) **R. Dif. Continental,** Merida 115, Ci. Juarez, Chih – 83) **R. XEFW,** Madero 416, Ote. Tampico, Tams. **D.Prgr:** 12.00–04.00.
84) **R. XEUX,** Hidalgo y Progreso, Tuxpan, Nayarit – 85) **R. Fortin,** Apt. Postal 4, Fortin de las Flores – 86) **R. Dif. XESB,** Hidalgo y Angela Peralta, Santa Barbara, Chih. **D.Prgr:** 24 h – 87) **R. Metropolitan,** Paseo de la Reforma 139, México, DF – 88) **R. Dif. XEFG,** Independencia y Madero, Edif. Salgado, Cely, Gunajuato – 89) **R. XETQ,** Sur 3 No. 2 Orizaba, Ver.
90) **R. XEM,** Independencia 1211, Chihuahua, Chih – 91) **R. XEZR,** Matamoros 18, Zaragoza, Coah – 92) **Nacional R. Emis,** Ca. Libertad 1302, Chihuahua – 93) **R. Dif. XEAL,** Ninos Heroes 670, Manzamillo, Col – 94) **R. XEDU,** 20 de Noviembre 105, Pte. Durango, Dgo.
95) **R. XEMO,** Durango 10, Tijuana, BC – 96) **R. XENW,** Matamoros 14, Culiacán, Sin – 97) **R. XEMM,** Morelia, Mich – 98) **R. Dif. XEEM,** Qldama 55, Rio Verde, S.L.P – 99) **R. XEHO,** Guerréro 426, Ci. Obregon, Son.
100) **R. XEBM,** Jardin Hidalgo 15, San Luis Potosi, S.L.P – 101) **R. Culiacán,** Escobedo 226, Pte. Culiacán, Sin – 102) **R. XEMJ,** Zaragoza Sur 607, Piedras Negras, Coah – 103) **R. XEOK,** Xicotencatl 1051, Monterrey NL. **FM:** 88.7Mc – 104) **R. Dif. XEQD,** Ca. Victoria 319, Chihuahua, Chih – 105) **R. XEWV,** Av. Madero 410, Mexicali, BC. **FM:** 89.6Mc – 106) **R. XEGM,** Av. "G" 185, Tijuana, BC – 107) **Televisión Nortena,** Apt. Postal 16, Nueva Rosita, Coah – 108) **El Pregonero del Bravo,** Dr. Mier 2223, Altos, Nueva Laredo, Tam. **D.Prgr:** W 12.00–06.00, Sun 14.00–20.00. **V.** by letter – 109) **R. XECS,** Zaragoza y Allende, Manzanillo, Col.
110) **R. XEGB,** 3a Hidalgo 37, Coatzacoalcos, Ver – 111) **R. XEHK,** Pedro Moreno 315, Desp. 203–205, Guadalajara, Jal.
112) **R. Dif. XEOZ,** Paseja Enriques Local F. Jalapa, Ver – 113) **R. XEIQ,** Sinaloa 175 Sur, Ci. Obregon, Son – 114) **R. Dif. XEROO,** La Voz de Quintana Roo, Chetumal, Quintana Roo – 115) **Propulsora del Radio,** Av. Madero y Venustiano, Monterrey, NL – 116) **Mexican Broadc. Co,** Constitución 402, Ci. Juárez, Chih – 117) **R. El Callo,** Ca. Novena 95 entre Bravo y Bustamente, Matamoros, Tams – 118) **R. XECJ,** Apt. Postal 106, Apatzingan, Mich. **L.P:** Mgr: M. Flores E. **D.Prgr:** 11.55–04.00. **V.** by letter – 119) **R. Mérida,** Ca. 62 No. 526, Mérida, Yuc.
120) **R. XEOW,** Leandro Valle y Aquiles Serdan, Mazatlán, Sin.
121) **Univ. de Guanajuato,** Guanajuato, Gto – 122) **R. Navojoa,** Morelos y Toledo, Navojoa, Son – 123) **R. XELC,** Av. Madero 116, La Piedad. **L.P:** Dir. Gen: H. Guizar C. Dir. Tec: L. Narez. **D.Prgr:** 12.30–05.00. **N:** 13.00, 03.00.
124) **R. XENR,** Juárez 6, Altos, Nueva Rosita, Coah – 125) **R. Centro Jaibo,** Apt. Postal 414, Tampico, Tams. **L.P:** Dir. Gen: Dr. A. A. Cantú. Dir. Tec: Ing. S. Lira R. **D.Prgr:** 12.00–06.00 – 126) **Radiofónica de Nayarit,** Veracruz Nte 125, Edif. Veracruz, Tepic, Nay.
127) **El Pregonero del Norte,** 15 de Mayo Ote 650, Monterrey, NL. **L.P:** Pres: A. Garza Lagüera. Gen. Mgr: Lic. L. Gutierrez N. Dir. Tec: Eng. J. Orozco. Dir. News: M. Truaba R. **D.Prgr:** XET: 12.00–06.00, XEJM: 13.00–05.00. **N:** every half h. **FM:** 94Mc 0.25kW.
128) **R. Ciudad Guzmán,** Artes 53 y 57, Ci. Guzmán, Jal.
129) **R. XECL,** Av. Madero 621, Mexicali, BC.
130) **R. Dif. XEHZ,** Carret Transpeninzular Kilometro 5, La Paz, Baja California Sur – 131) **R. Dif. XEFV,** Maxtla 519, Ci. Juaréz, Chih – 132) belongs to 85) – 133) **R. XEDX,** Ensenada, BC – 134) **R. Casas Grande,** Av. Porfirio Diaz y Minerva 400, Nuevo Casa Grandes, Chih – 135) **Emisoras de Terreón,** Av. Juaréz 1465, Torreón, Coah.
136) **R. XEWS,** Rubi 57, Nte, Depto. 1, Guliacán, Sin – 137) **R. Dif. XEXL,** Portal Arteaga 2, Zitacuaro, Mich – 138) **R. XED,** Av. Zacatecas, Entre C. 7 a y 8 a, Mexicali, BC – 139) **La Voz de Norteamérica** Hidalgo 426, Ote. Monterrey, NL. **D.Prgr:** 24 h. **English:** 00.30–12.00.
140) **R. Tehuacán,** Av. Libertad 113-A, Tehuacán, Pue – 141) **R. Dif. XEIT,** Av. Ultimo Paseo y Ca. 43, Ciudad del Carmen, Campeche.
142) **R. Impulsora de Occidente,** Av. 16 de Septiembre 520, Guadalajara, Jal.
143) **R. Juventud,** Rayón e Indep. Edif. Literia Nacional, Desp. 401, Veracruz, Ver – 144) **Interamericana de Radio,** Edif. Calif. desp. 2, Tijuana, BC – 145) **R. Laredo,** Matamoros y Pino Suárez, Nuevo Laredo, Tams – 146) **R. Dif. XEOQ,** Apt. Postal 301, Rio Bravo, Tams.
147) **R. XETR,** Carretera México-Laredo 29 Sur, Ci. Valles, S.L.P.
148) **R. Dif. XEBF,** Av. Hidalgo Pte. 309, San Pedro de las Colónias, Coah – 149) **R. Comercial de Baja California,** Ley de Alfabetizacion 257, Desp. 1, 5, 6, 7, Mexicali, BC.
150) **R. XEJS,** Colegio 14, Hidalgo del Parral, Chih – 151) **La Voz de Zacatecas,** Miguel Auza 10, Zacatecas – 152) **R. Coatepec,** 16 de Septiembre 12, Coatepec, Ver – 153) **R. Televisora Siglo XX,** Av. Juárez 199 Sur, Reynosa, Tams – 154) **R. XEFR,** Isabel la Católica 33–117, Mexico, DF – 155) **R. Dif. XEPZ,** Ciudad Juarez, Chih.
156) **R. Dif. XEZI,** Apt. Postal 16, Zacapu, Mich – 157) **R. Televisora de Tampico,** Diaz Miron 310 altos, Tampico, Tams – 158) **R. Delícias,** Av. 4a y Ca. 4a Norte, Ci. Delicias, Chih – 159) **R. XEBQ,** Av. Serdan y Cal. 22, Guaymas, Son.
160) **R. XELD,** Cerret, Guadalajara-Barra de Navidad Kilometro 198, Autlan de Navarro, Jal – 161) **R. Televisora del Bajio,** Edif. "Seara", León, Gto – 162) **R. Televisora de Jalisco,** 16 de Septiembre 456, Guadalajara, Jal. **V.** by letter. Rp – 163) **R. XEDL,** Angel Flores 26, Ptes, Hermosillo, Son – 164) **R. Emis. Querétana,** Av. Zaragoza Pte. 15, Queretaro, Qro – 165) **R. XEPI,** Carretera a Chilapa y Las Frondas, Tixtla, Gro. **L.P:** Dir. Gen: A. Peyron G. **D.Prgr:** 12.00–04.00 – 166) **R. Saltillo,** Manuel Acuna Sur 102, "C", Saltillo, Coah.
167) **Capital Broadc. System,** Av. Reforma 400, Desp. 701, México, DF. **D.Prgr:** 24 h. **English:** 13.00, 02.00, 04.00 – 168) **R. Linares,** Carretera Nacional México-Laredo, Linares – 169) **R. XEMF,** Zaragoza 158, Monclova, Coah.
170) **R. Dif. XEOG,** Libertad 1302 altos, Chihuahua, Chih – 171) **R. XEAX,** Av. Manuel Garcia Vigil 5, Caxaxa, Cax – 172) **R. Dif. XEMW,** Apt. Postal 1203, San Luis Rio Colorado, Son – 173) **R. XEPV,** Mina 1, Papantla de Olarte, Ver – 174) **Promotoras de Radio,** Madero 15, Zacapu, Mich.
175) **La Voz de Córdoba,** Av. Uno 590, Córdoba – 176) **R. XEAW,** Parioutin 316, Sur Col. Roma, Monterrey, NL. **D.Prgr: N:** Every half h.
177) **R. Emis. del Norte,** Av. V. Carranza 514, Chihuahua, Chih.
178) **R. XEGJ,** Av. Juarez 171, Desp. 504, Guadalajara, Jal.
179) **R. XEAP,** Sinaloa 206, Ci. Obregón, Son.
180) **R. XEIG,** Iguala, Gro – 181) **R. XELE,** Muello 304, Sur, Tampico, Tams.
182) **R. Dif. XESW,** Carret Madera-Chihuahua Km 1, Ci. Madera, Chih – 183) **R. XEXW,** Obregón 51, Nogales – 184) **R. XEAM,** Carretera Matamoros, Ci. Victoria, Matamoros, Tams – 185) **La Voz de la Laguna,** Cepeda Sur 409, Torreón, Coah – 186) **R. XEFH,** Ca. 5a y Av. Panamericana, Agua Prieta, Son – 187) **R. XEHV,** Edif. Virginia Deos 4y5, Veracruz, Ver.
188) **Ondas Populares,** Venustiano Carranza 4-A, San Luis Potosi.
189) **R. XEVI,** Juarez 26, Ote. San Juan del Rio, Oro.
190) **R. Mazatlan,** Mariano Escobedo y Belizario Dominguez, Mazatlan, Sin. **FM:** 88.1Mc – 191) **La Voz del Centro,** Berriozabal 8, Irapuato, Gto – 192) **R. XEFC,** Ca. 64 No. 498, Merida, Yuc.
193) **R. XERP,** Alvare Obregón y 2 de Enero, Ci. Madero, Tams. **FM:** 88.5Mc – 194) **R. XEWQ,** Hidalgo 229, Nte. Monclovia, Coah.
195) **R. XECW/XECU,** R. O. Castro y Allende 302, Los Mochis, Sin.
196) **La Voz de Delicias,** Av. Agricultura y Ca. 4a No. 605, Delicias, Chih – 197) **R. XEDKT,** López Cotilla 769, Guadalajara, Jal – 198) **R. XEOS,** Cd. Obregón, Son – 199) **R. XEOM,** Zaragoza y Corregidora, Coatzacoales, Ver.
200) **R. Laguna,** Apt. 225, Torreón, Coah. **D.Prgr:** 12.55–05.00. **V.** by letter – 201) **R. XEY,** Tres Guerras 44, Celaya, Gto – 202) **R. XEKF,** Altamirano 21, Iguala, Gro – 203) **La Voz de Sinaloa,** Mariano Escobedo Pte 65, Culiacán, Sin – 204) **R. XEA,** Ca. 12 No. 110, Campeche, Gam.
205) **R. Com. Sonorense,** Edif. Bco. Agric. Ganadero, Nogales, Son. **V.** by QSL-card – 206) **R. Dif. XEHX,** Ninos Héroes 219, Ci. Obregon, Son – 207) **R. Dif. XEPA,** Ca. 7 Pte. 102 altos, Puebla, Pue – 208) **R. XEXL,** Lote 14, Colonia Morelos, Patzcuaro, Mich – 209) **R. XEGW,** 13 Hidalgo y Juárez, Ci. Victoria, Tams.
210) **R. XERK'** Av. Mexico 224 Nte, Tepic, Nay – 211) **Mexican Broadc. Co,** Ojinaga 4106, Chihuahua, Chih – 212) **R. El Callo,** Pedro José Mendéz 154 Ote, Reynosa, Tams. **L.P:** Gen. Mgr: R. Olivares S. Dir. Tec: W. Sanchez L – 213) **R. Impulsora de Occidente,** Av. 16 de Septiembre 520, Guadalajara, Jal – 214) **La Voz de las Huaxtecas,** Independencia y P. Correo Viejo, Tuxpan, Ver. **L.P:** Owner: C. A. Barron. **D.Prgr:** 12.00–05.00 – 215) **R. Dif. XEGD,** Maclovio Herrera 79, Hidalgo del Parral, Chih – 216) **R. XEI,** Portal Hidalgo 213, Morelia, Mich – 217) **R. XEJL,** Independencia 27, Guamúchil, Sin.
128) **R. Tiempo,** Emilio Carranza 320, Ote. Tampico, Tams – 219) R.

XEAB, Santa Ana, Son – 220) **R. XETY,** Carret a Tecoman Km 1, Cerro de Ortega, Tecoman, Col – 221) **Universidad Veracruzana,** Domicilio Concocido, Jalapa, Ver – 222) **R. XEAS,** Mina 5037, Nuevo Laredo, Tams – 223) **La Voz del Valle del Euerte,** Av. Obregón 204, Los Mochis, Sin – 224) **R. Televisora Tabasqueña,** Av. Juárez 15, Villahermosa, Tal – 225) **R. XEF,** Pasaje Ramon Corona 2, Edif. Continental, Ci. Juarez, Chih – 226) **R. XEEW,** Edif. Card. Galván, Abasolo y Sexta, Matamoros, Tams – 227) **R. XEH,** Ca. 13a No. 205, Chihuahua, Chih – 228) **R. Dif. XERPC,** Hotel Victoria, Chihuahua. **L.P:** Dir. Gen: E. Rivas T. Dir. Tec: J. Sánchez H. V. by letter.
229) **R. Irapuato,** Apt. Postal 118, Irapuato, Gto. **D.Prgr:** 12.00–06.30.
230) **R. Dif. XEWJ,** Reforma 205-C, Tehuacan, Puebla – 231) **R. XEXX,** Revolución y Octava, Tijuana, BC – 232) **R. Mexicanas,** Jardin Hidalgo 16 altos, San Luis Potosi – 233) **R. Dif. XEIG,** Aladama 14, Iguala, Gro – 234) **R. XELL,** Av. Independencia 231, Veracruz, Ver – 235) **R. XELY,** Morelos Nte 68, Morelia, Mich – 236) **R. XEOX,** Veracruz 63 Sur, Ci. Obregón, Son. **XEHX:** R. Obregón. **XENH** (Tr. at Escuinapa, Sin).
237) **R. Dif. XEWD,** Ca. Sexta 702, Ci. Miguel Aleman, Tams.
238) **R. XEXD,** Atlixco, Pue – 239) **R. XEJD,** 20 de Noviembre 54 altos, Poza Rica, Ver – 240) **R. Emis. Querétana,** Av. Zaragoza Pte. 15, Querétaro, Qro – 241) **La Voz de Orizaba,** Poniente 7, No. 57 altos, Orizaba, Ver – 242) **R. XEVH,** Alts Edif. Carcia Cárdenas, Ca. Hidalgo, Villa Hermoso, Tams – 243) **R. XEJT,** Diaz Mirón 106, Ote. Tampico, Tams – 244) **R. XELX,** Av. Revolucion 194, Zitacuaro, Mich – 245) **R. XEYC,** Av. 16 de Septiembre y Progreso, Ci. Juárez, Chih – 246) **R. XEAU,** Av. Carranza 1638, Tijuana, BC – 247) **R. Colima,** Apt. 147, Colima. **D.Prgr:** 13.00–01.00 – 248) **R. Dif. XEHI,** Ca. Séptime 105 altos, Ci. Miguel Aleman, Tams – 249) **El Heraldo del Chocolate Abuelita,** Rebsaman 241, Col. Narvarte, México, DF.
250) **R. Dif. XEHM,** Ci. Delicias, Chih – 251) **Radiofónica de Poza Rica, Ca.** 6 Nte. 2 y Av. Central Ote, Poza Rica – 252) **R. XENJ,** Av. Juárez y Allende, Edif. Maracán, Monterrey, NL – 253) **R. XEDR,** Av. Serdán 283, Altos, Guaymas, Son – 254) **R. Dif. XEED,** Granja "El Brillante" Ameca, Jal.
255) **R. Dif. XEFF,** Julián de los Reyes 15, Matehuala, S.L.P.
256) **R. Zamora,** B de Mayo 285 Sur, Zamora, Mich – 257) see 259).
258) **R. Dif. XESD** – 259) **R. XEBG,** Av. "C" 225 altos, Tijuana, BC.
260) **R. 155,** Carrillo Puerto 6, Jalapa, Ver. **D.Prgr:** 12.00–06.00.
261) **R. XENU,** Av. Madero 2201, altos, Nuevo Laredo, Tams.
262) **R. XERMK,** Ci. Satelite, Est. de Mexico – 263) **R. XERX,** Morelos 7, Salamanca, Gto – 264) **Cia R. Dif. de Coahuila,** Prolongación Guerrero, Camino a San Carlos, Ci. Acuña, Coah – 265) **R. Pacifico,** Matamoros, Hermosillo – 266) **La Voz del Sur,** Km 213, Carretera México-Acapulco, Chilpancingo, Gro – 267) **R. Tulancingo,** Av. Juárez Sur 200–3, Tulacingo, Hgo – 268) **R. XEQL,** Apt. Postal 40, Zamora, Mich – 269) **La Voz de Meoqui,** Av. 6a Nte. 402, Ci. Delicias, Chih.
270) **Promotriz Radiofónica,** Av. 16 de Septiembre 130 2 piso, Guadalajara, Jal – 271) **R. XEAE,** Guerrero y Ocampo 450, Ci. Acuña Coah.
272) **R. Dif. XENY,** Campillo y Fencio, Nogales, Son.

NETHERLANDS ANTILLES

L.T: GMT–4½ h – **Pr.L:** Papiamento, Dutch.

GOVERNMENT RADIO & TELEGRAPH ADMINISTRATION

ADDR: P.O. Box 103, Curacao. **Cable:** "Gentel". **Te:** 11500 – **L.P:** Dir: Ing. R.H.C. van Haaren.

CURACAO

RADIO CUROM (Foundation: "Curacaosche Radio Vereeiniging" – non profit foundation).
FI: by adv and donations of members – **ADDR:** P.O. Box 31, Willemstad, Curacao. **Cable:** Curaver. **Te:** 12555.
L.P: Pres: C.G. Grootens. St. Mgr: L.C.H.M. Bergman. Dir. Tec: G.V. Lotman.
STATION: PJC-2 855kc 5kW.
HOME SCE: 11.00–03.30(Sun 13.30–17.30, 20.30–03.30).
Dutch: 11.00–20.30(Sun 13.30–17.30), 23.00–03.30. **Papiamento:** 20.30–23.00.
N: Dutch: 11.30, 12.30, 15.00, 17.00, 20.30, 23.30, 02.30. **Papiamento:** 22.30 – **Spanish:** Mon, Fri: 17.30–19.30. Wed: 01.30–02.30 – **ANN:** English: "This is R. Curom in Willemstad, Curacao Neth. Antilles". Dutch: "Hier is de Curom te Willemstad op Curacao op een frequentie van 855kc perioden per sec. dat is 350.08meter". Papiamento: "Aki ta Curom na Willemstad Corsouw riba su frequencia de 855kp. per sec. igual na 350.08 meter – **INT-SIG:** Part of the Curom-march, played by a big band – **V.** by letter. Rp.

RADIO HOYER (Cultural, Comm.)
FI: R. Hoyer 1 and 3 by adv, Hoyer 2 on cultural basis.
ADDR: Julianaplain 21, Willemstad. **Cable:** Radioyer. **Te:** 11673 – **L.P:** Dir. Gen: H.E. Hoyer.
STATIONS: PJC7 1010kc 1kW – PJC2 1500kc 1kW.
HOME SCE: W 09.30–04.30, Sun 12.30–03.30.
Spanish Papiamento on 1010kc, Dutch/English on 1500kc.
N: Spanish: On the ½ h and 10.45, 11.45, 16.50, 22.00, 01.30. **Papiamento:** On the h and 13.30, 16.30, 22.30. **Dutch:** On the h and 11.15, 13.30, 17.30, 21.45, 23.00. **English:** On the ½ h and 12.00, 15.30, 17.15, 01.30.
ANN: English: "This is station PJC7 R. Hoyer transmitting on..." – **V.** by QSL-card.

RADIO CARIBE (Comm.)
FI: By adv – **ADDR:** Nieuwestraat 22B, Willemstad. **Cable:** R. Caribe. **Te:** 12801 – **L.P:** Dir. Gen: C. R. Heillegger. Dir. Tec: G. A. T. Heillegger.
STATION: PJL3 1230kc 0.25kW.
HOME SCE: W 10.30–04.30, Sun 12.30–04.30.
W: Papiamento & Spanish 10.30–01.00. **Dutch & English** 01.00–04.30. **Sun: English** 12.30–14.30. **Papiamento & Spanish:** 14.30–22.30. **Dutch & English** 22.30–04.30. **N: Spanish: W:** 13.30, 17.30, 22.30, 00.45, Sun: 17.30. **Papiamento: W:** 16.45, 17.00, 17.15.
ANN: E: "This is R. Caribe broadc. on its assigned freq. of 1230kc 243.9m". Dutch: "U luistert naar R. Caribe te Willemstad Curaçao, op een frequentie van 1230 kiloperioden per seconde". Papiamento: "Oyentes ta na sintonia di P.J.L.3, R. Caribe, na Curacao, transmitiendo riba su frequencia di 1230kc, igual na 243.9m". Sp: "Transmite para ustedes la emisora P.J.L.3, Caribe, en su frequencia de 1230 kc, desde Curacao, Antillas Nederlandesa" – **V.** by letter. Records accepted – **F.PL:** 1kW 540kc, 1kW on 1580kc, change in prgr's expected.

ARUBA

RADIO KELKBOOM (Comm.)
ADDR: P.O. Box 146, Oranjestad. **Cable:** Kelkboom. **Te:** 1899.
L.P: Mgr: C. A. Kelkboom.
STATION: PJA5 1435kc 1kW.
HOME SCE: W 11.30–02.30, Sun 14.30–02.30.
Papiamento: N: 12.00, 13.30, 14.30, 15.30, 16.45, 21.00, 23.30. **Spanish:** Mon–Fri 18.30–19.00, 00.45–01.15 – **Dutch:** Sun 20.30–21.30, Wed 01.45–02.15, Fri 19.00–19.30 – **ANN:** Dutch: "Hier PJA-5 R. Kelkboom te Oranjestad Aruba". E: "This is PJA-5 R. Kelkboom at Oranjestad Aruba". Papiamento: "Ta transmiti R. Kelkboom PJA-5 na Oranjestad, Aruba" – **Y.** by QSL-card. Rp.

RADIO VICTORIA (Sponsored and owned by the Evangelical Alliance Mission – Team) – **FI:** By comm. adv. and free will offerings – **ADDR:** Oranjestad. **Cable:** Team. **Te:** 7090.
L.P: Mgr: Rev. P. J. Pietsch. Dir. Tec: C. Jobes.

Christ to the World in 23 languages

TWR

Trans World Radio

Paul E. Freed, Ph. D.
PRESIDENT

MONTE CARLO
MONACO

BONAIRE
NETH. ANTILLES

STATION: 900kc 10kW.
HOME SCE: W 10.30–02.30, Sun 11.30–01.30.
English: 17.00–19.15, 22.00–01.00. N: 14.30, 17.00, 22.30 – Dutch: 01.00–02.30. N: 01.00 – Papiamento & Spanish: 10.30–17.00, 19.15–22.00. N: 11.00, 13.00, 13.30, 16.30, 20.45, 21.15, 22.30 – ANN: E: "This is R. Victoria, the Cultural Voice of the Caribbean". Sp: "Transmite R. Victoria, La Voz Cultural del Caribe" – V. by letter. Rp. Records accepted.

RADIO ANTILIANA (Comm.)
ADDR: P.O. Box 28, St. Nicolaas. Te: 5602 – L.P: Dir. Gen: E. J. Prins. Gen. Mgr: H. E. A. Booy. Dir. Tec: H. Nirop.
STATION: PJA8 775kc 1kW.
HOME SCE. in Papiamento, English, Dutch: W 10.00–04.30. Sun 11.30–04.30 – N (W): English: 10.40, 11.40, 14.40, 16.35, 17.00. Papiamento: 11.00, 12.00, 13.30, 16.50, 17.30, 21.30, 23.00 – ANN: E: "This is st. PJA8, R. Antiliana, transmitting on a freq. of 775kc, which equals a wave-length of 388m, from studios located at Lago Heights, San Nicolaas, Aruba, Isle of progress in the NA" – V. by letter. Records accepted.

VOICE OF ARUBA (Comm.)
ADDR: Van Leeuwenhoekstraat 12, Oranjestad.
L.P: Dir: A.M. Arends Jr. Dir. Tec: D. Odor.
STATION: PJA-10 1325kc 1kW.
HOME SCE. in Dutch, English, Spanish: 10.30(Sun 12.30)–02.30.
ANN: "You are tuned to Station PJA-10 – The Voice of Aruba" – INT-SIG: 4 strokes on a 4 metal bar percussion instrument – V. by QSL-card or letter.

BONAIRE

TRANS WORLD RADIO (Cultural, Educational, Religious)
FI: Voluntary contributions from individuals, organisations, foundations, churches).
ADDR: Trans World Radio, Bonaire. Cable: Votan. Te: 440.
L.P: Dir. Gen: R. Freed. St. Mgr: W. P. Mial.
STATIONS System: Continental Electronics: 800kc 375m 500kW – 50 kw sw-tr. testing to the Caribbean area in the 49,31,25,19 m.
D.PRGR'S: W: 08.29–12.35, 22.15–03.00. Sun 08.30–03.00.
English: 10.30–12.35(Sun 22.00), 01.30–03.00 – German (Thurs only): 23.00–23.15 – Dutch (Fri only): 22.15–22.30 – Portuguese: 08.30–09.30, 23.15–23.30 – Spanish: 09.30–10.30, 22.30(Sun 22.00)–23.15(Thurs 23.00) – N: English & Spanish every half h throughout schedule above.
ANN: "This is Trans World Radio, Bonaire, N.A" – V. by QSL-card or letter. Records accepted – PUB: Prgr.schedule free – F.PL: 260kW sw-tr. before end of 1964 to Europe, Africa, Mid East, No, C & So America on 16, 19, 25, 31, 49m.

THE VOICE OF BONAIRE (Comm.)
ADDR: & L.P: See Hoyer – STATION: PJB2 1385kc 1kW.
HOME SCE: W 11.30–18.30, 22.30–02.30, Sun 14.30–17.30, 22.30–02.30.

ST. MAARTEN

THE VOICE OF SINT MAARTEN (Comm.)
ADDR: P.O. Box 18, Philipsburg. Te: 2380 – L.P: Dir. N.C. Wathey. Dir. Prgr: B. Mayer.
STATION: PJD2 1300kc 1kW.
HOME SCE. (Cultural and Rlg): 10.30–02.30 – V. by letter – F.PL: 10kW.

NICARAGUA

L.T: GMT–6 h – Pr.L: Spanish.

JEFATURA DEL RADIO NACIONAL, Apt. 209, Managua.
STATIONS: All st's comm. exc. 21) (Go.), 14) (Cultural), 15) (Rel.).

Short Waves: Call: YN—. * inactive.

	Call	kc	m	kW	Name and h of tr.
1)	RG	5955	50.38	0.5	R. Zelaya, Bluefields
2)	WW	5965	50.29	0.5	R. Sport[2], Granada: 23.00–04.00
3)	X	6025	49.79	5	R. Equis, Managua: 12.00–06.00
4)	LUA	6040	49.67	0.5	R. City, Managua: 12.00–06.00
5)	TP	6055	49.55	0.5	R. Puerto, Puerto Cabezas
6)	EQ	6065	49.46	0.6	R. Universal, Managua: 12.00–04.00
7)	RS	6085	49.30	0.5	Ondas Populares, León
8)	HC	6100	49.18	0.5	R. Hernandez Cordoba, Ocotal
9)	CA	6120	49.02	0.5	R. Atlantico, Bluefields
10)	I	6130	48.94	1.5	R. Dif. León XIII, León
11)	WA	6140	48.86	0.5	R. Mundial[1], Managua: 11.00–05.00
12)	MV	6150	48.78	1	R. Continental, Managua
13)	UW	6190	48.47	0.25	R. Darío[2], León
14)	JM	6200	48.39	1	R. Norte, Somoto
15)	OLA	*15229	19.70	0.025	Ondas de Luz, Managua.

Medium Waves: Call: YN—. °=Short Wave.

	Call	kc	kW		Call	kc	kW		Call	kc	kW
16)	G	555	1	27)	T	945	0.5	42)	WX	1270	2.5
3)	X	°570	5	28)	LU	965	1	43)	RA	1300	0.37
17)	BO	575	1	29)	CR	980	0.5	10)	HI	1310	2
18)	RD	590	2.5[2]	30)	Y	1000	3	44)	XZ	1320	0.2
19)	E	605	2.5	11)	W3	1025	1[1]	45)	DM	1340	0.5
20)	M	620	10	31)	LL	1050	2[2]	46)	GF	1360	0.25
2)	XW	°650	1[1 2]	32)	TW	1070	0.17	3)	X	1370	1
21)	D	675	5	33)	AE	1090	1	47)	LM	1385	0.5
22)	SC	700	1	34)	Q	1100	3	3)	X	1400	1
23)	S	725	1	10)	L	1115	1	3)	X	1420	1
3)	X	°750	10	35)	RC	1130	10	48)	MS	1440	0.5
11)	W2	775	1[1]	36)	BC	1150	0.8[2]	49)	TJ	1460	3.3
24)	R	800	1	37)	SB	1160	0.5	50)	AG	1475	2
15)	OL	°825	15	13)	UW	°1170	0.375[2]	51)	PT	1500	0.5
25)	MV	850	10	38)	C	1200	0.5	52)	CZ	1515	1
11)	W1	875	1[1]	39)	OP	1220	0.5	10)	P	1530	0.5
26)	WS	900	5	40)	CW	1240	3[2]	53)	RPS	1575	2
11)	W	°930	10[1]	41)	H	1250	1	54)	JG	1590	0.5

[1] R. Mundial Nicaraguan Radio Network – [2] R. Sport Network.

Short Waves:
1) Bluefields – 2) Granada.
3) Apt. 1505, Managua. Te: 5404. Cable: Tevenic – L.P: O: R. Caño G – D.Prgr: 12.00–06.00 N: 12.30, 19.30, 03.30 – Ann: "En Managua Nicaragua transmite Estación Equis la Emisora favorita de la Juventud – 4) Managua – 5) Puerto Cabezas.
6) Apt. 338, Managua – 7) León – 8) Ocotal – 9) Bluefields – 10) León.
11) Cadena Nicaragüense de Radiodifusión, 5a Av. N.O. 703, Managua – Te: 3851 – L.P: Dir. Gen: M. Arana V. Dir. Tec: F. Arana V. Dir. Prgr: C. Sandoval – D.Prgr: N: 12.45, 18.00, 19.30. Comm: 23.45 – Ann: "Cadena Nicaragüense de Radiodifusión desde R. Mundial...en Managua" – Int-Sig: Gong – V. by letter. Records accepted – Affiliated st's: 2), 18), 24) – F.Pl: TV.
12) Managua – 13) León – 14) Somoto.
15) Apt. Postal 607, Managua, D.N – L.P: Dir: F. M. Doña – D.Prgr: Sp: 12.00–03.00, E: 03.00–04.00 N: 01.00, 04.00, 18.00 – Ann: Sp: "En sintonía con R. Ondas de Luz", única emisora en el pais sin anuncios comerciales con su lema "Orientando su camino con la luz de la Verdad", E: "You are in tune with the radio voice of YNOL "Waves of Lights", from Managua, the beautiful land of lakes and volcanos" – V. by QSL-card or letter.

Medium Waves:
16) R. Titania, Chinandega – 17) R. Musical, Masaya – 18) R. Quinientosnoventa, Managua – 19) R. Uno, Managua – 20) Radiodif. Nacional, Edif. Benard, Managua – Ann: "Paz, Libertad, Progreso, transmite R. dif. Nacional de Nicaragua" – V. by letter. Rp.
21) Union Radio, Apt. 1148, Managua – Ann: "Union Radio, La Onda Musical y Deportiva 675kc, Managua de la Cadena Inter-Americana WRUL de New York" – V. by QSL-card and letter – Pub: Prgr. sched. free on request – 22) R. Centauro, Managua.
23) R. Tic Tac, Chichigalpa – 24) R. Reloj, Managua – 25) R. Continental, Av. Este 1200, Managua – 26) R. Alma Nica, Managua – 27) La Voz del Tuma, Jinotega – 28) R. Managua, Managua – 29) R. Mongalo, Rivas.
30) R. Mil, Managua – 31) R. Masaya, Masaya – 32) R. Centro, Granada. 33) R. Musun, Matagalpa – 34) La Voz de la Victoria, Managua.
35) R. Católica de Nicaragua, Apt. 1130, Managua, D. N – Ann: "Por Cristo y por su Iglesia, transmite YNRC, R. Católica de Nicaragua" – V. by letter – F.Pl: 5kW sw-tr.
36) La Voz de la Segovia, Esteli – 37) Estacion YNSB, Juigalpa – 38) R. Capital, Managua – 39) R. Cultural, Jinotepe – 40) R. Occidental, Chinandega – 41) Ondas de Nicaragua, Managua – 42) R. Atenas, León.
43) La Voz de Chinandega, Chinandega – 44) R. Cocibolca, Granada – 45) R. Sonora, Managua – 46) Ondas del Sur, Jinotepe – 47) R. Monumental, Boaco – 48) R. Philips, León – 49) El Eco de las Brumas, Jinotega.
50) R. Cosiguina, Chinandega – 51) Tierra Pinolera, Managua – 52) Estacion YNCZ, León – 53) R. Granada, Granada – 54) R. Colinas, Jinotega.

PANAMA

L.T: GMT–5 h – Pr.L: Spanish.

GOVT. DEPT. JURISDICTION
ADDR: Direccion Tecnica de Radiocomunicaciones, Ministerio de Gobierno y Justica, Apt. 3422, Panama. Cable: Dirgentel Radio – L.P: Tec. Dir: Eng. F. A. Lamparero.

ASOCIACION PANAMEÑA DE RADIODIFUSIÓN
ADDR: Apt. 7387, Panama – L.P: Pres: J. L. Salas.
STATIONS: C=Circuito. *=currently inactive.
All st's comm. exc. 10) (Rlg.), 19) (Cultural & Rlg.), 20) (Mil.).

Short Waves:

	Call	kc	m	kW	Name and h of tr.
1)	HOM50	5995	50.04	1	C.R.P.C., Panama: 11.55–05.00
2)	HP5B	6030	49.75	0.25	R. Cadena Miramar, Panama: 11.00–06.00
3)	HOU31	6045	49.63	1	La Voz del Baru, David: 11.00–04.00
4)	HOLA	*9505	31.56	0.25	R. Atlantico, Colon
5)	HP6J	*9607	31.23	0.5	La Voz de Panama
6)	HOJ53	*9645	31.10	0.3	R. Mia, Panama
1)	HOF31	9685	30.98	1	Onda Popular, Panama: 11.55–05.00

Medium Waves: Call: Ho–––. °=Short Waves. *=FM.

	Call	kc	kW		Call	kc	kW
7)	U23	540	0.25	15)	G2	1090	0.25
8)	N31	550	1	26)	R58	1100	0.25
1)	H2	560	0.25	1)	F47	1120	1
1)	H3	590	1	27)	J	1130	1
1)	HM	610	10	28)	B49	1140	1
9)	K	640	0.25	29)	S25	1150	0.25
6)	S22	°645	1	17)	NZ	1170	0.25
1)	II4	660	1	30)	OC	1180	1
10)	LY	670	1	31)	E91	1210	4
11)	F32	680	0.5	12)	W	1230	0.25
12)	A	700	1	32)	M56	1240	1
2)	HP5C	°730	1	33)	Q	1250	0.25
13)	XO	760	5	34)	J22	1270	0.5
14)	ACA20	790	5	35)	JU	1280	0.25
1)	F33	810	1	11)	S23	1295	1
15)	G	830	0.25	4)	K3	1310	0.25
8)	N32	840	10	36)	L55	1315	1
16)	HO	870	1	28)	M92	1330	0.25
17)	R34	890	1	5)	HP6J	°1380	0.25
18)	HA	900	0.5	4)	L	°1390	0.25
6)	S56	920	1	37)	HS	1400	1
19)	X	940b	0.5	38)	RS	1410	0.5
20)	B33	950	1	14)	ACB20	1420	1
1)	F	°965	3	9)	C	1440	0.25
21)	R59	990	1	39)	D42	1460	0.25
22)	U44	1015	1	40)	OH	1470	1
1)	F2	1020	0.25	42)	R43	1490	0.25
3)	U	°1025	1	41)	N	1500	1
23)	S21	1035	1	43)	A95	1505	1
24)	J2	1045	1				
5)	HPM21	1060	1				
25)	D21	1070	0.25				

a)=under construction – b)=inactive.

Short Waves:

1) Apt. 1795, Panama. **Te:** 5-0160. **Cable:** Erepece. **L.P:** Dir. Gen: F. Eleta A, Dir. Tec: L. O'Meally. **C.R.P.C:** HOH2 Colon, HOH3 Chitre, HOHM Panama, HOH4 David – **FM:** HOH/HOH86 Panama, HOH87 Chitre. **D.prgr:** N: 11.30, 15.30, 18.00, 23.00. **Onda Popular:** HOF33 Bocas del Toro, HOS47. Darien, HOF Panama, HOF2 Colon. **FM:** HOH88 Panama. **Ann:** "Onda Popular". **V.** by QSL-card. **Re.** in Sp. or E.

2) Apt. 1214, Panama. **Te:** 30239. **L.P:** Dir. Gen: A. Boyd. St. Mgr: A. Jimenez. Dir. Tec: L. Sosa. **D.prgr:** 11.00–06.00 on 730/6030kc. **N:** 11.30, 18.00, 02.00. **V.** by QSL-card.

3) Apt. 160, David –

4) Apt. 44, Colon. HOK3: **La Onda de la Alegria. L.P:** Dir: A. Galindo. **V.** by QSL-card.

5) HP5J/HP6J: Apt. 867, Panama. HPM21: **La Voz de Ancon,** Av. Central 169, Panama. **L.P:** Pres: M. Diaz Doce. Gen. Mgr: J. G. Diaz I. **D.prgr:** 12.00–03.00. **N:** 12.00, 17.30, 23.30. **Ann:** "Desde Panama Puente del Mundo Corazon del Universo Transmite La Voz de Panama decana de las Emisoras Nacionales Compruebe su tiempo". **V.** by letter.

6) Apt. 5117, Panama. **D.prgr:** 10.00–04.30.

Medium Waves:

7) **R. Zarati,** Apt. 5661, Penonome. **L.P:** Dir: R. Fernandez D. **d.prgr:** 11.00–05.00.

8) **R. Aeropuerto,** Apt. 4824, Panama. **L.P:** Pres: J.L. Salas.

9) **Cadena Panameña de Radiodif,** Apt. 33, Colon.

10) **R. Hogar,** Apt. 1979, Panama. **Te:** 3-5425 – **L.P:** St. Mgr: & Dir. Gen: L. Mediano S – **D.prgr:** (670kc only): 11.00–03.00. **N:** 11.45, 16.45, 23.00, 04.00 – **Ann:** "R. Hogar, una emisora al servicio de la paz y la verdad" – **V.** by letter. **Re.** in Sp. E.

11) **R. Centenario,** Apt. 3, Puerto Armuelles. **L.P:** Dir: R.D. Gonzales. **D.prgr:** 10.00–04.00. **N:** 12.00, 17.30, 23.00. **Ann:** "Por el bienestar de la República y la sactisfaccion del oyente en general transmite R. Centenario, emisora HOF32, en 680kc en su radio, esta su emisora es miembre de la Asociacion Panameña de Radiodifusion".

12) **La Voz de Panama,** Apt. 1121, Panama.

13) **La Voz del Istmo,** Apt. 3269, Panama. **L.P:** St. Mgr: R. Beukema. Dir. Tec: H. Erickson. **D.prgr: Spanish:** 11.00 (Sun 11.30)–04.00. **English: W:** 11.00–14.00, 01.00–04.00. Sun: 11.30–17.00, 00.45–04.00 – **N: E.** 11.45, 03.00. **Sp.** 15.00, 17.00, 22.00. **Ann. E:** "This is HOXO, the Voice of the Isthmus, 760kc in Panama". **Sp.** "Esta es La Voz del Istmo, 760kc en Panamá. HOXO". **V.** by QSL-card.

14) **Southern Command Network (AFRTS),** Ft. Clayton, Canal Zone, ACA20, Panama.

15) **Estacion de la Communidad,** Apt. 1121, Panama.

16) **R. Musical,** Apt. 355, Panama. **L.P:** Dir: J.E. Sitton.

17) **Ondas Istmenas,** Apt. 3237, Panama. **L.P:** W. Zurita.

18) **La Voz del Pueblo,** Apt. 1045, Panama. **L.P:** Mgr. Dir: M. Lombardo V. **D.prgr:** 11.00–05.00.

19) Panama. **L.P:** Dir: L. Chiari – 20) **R. Cultura,** Apt. 249, Concepcion – 21) **R. Leblanc,** 16 Oeste 13a–20, Panama.

22) **R. Reloj,** Apt. 5124, Panama. **L.P:** St. Mgr: A.D. Carrillo. **D.prgr:** 24 h. **N** every 20 min. **Ann:** "HOU44, 1015kc, Onda Larga, HOU44 FM 92Mc Alta fidelidad desde Panama, Capital de la República de Panama. Una emisora afiliada a la Asociación Panameña de Radiodifusión. Un pueblo sin musica es un pueblo sin alma, por eso brindamos musica y mas musica".

23) **Victor Miranda,** Panama – 24) **Ondas del Canajagua,** Apt. 10, Las Tablas. **L.P:** Gen. Mgr: S. Villareal Jr. **D.prgr:** 24 h.

25) **Ondas del Caribe,** Av. Melendez y Roosevelt 8044, Colon: **L.P:** Owner J.M. Carrasquilla – 26) **R. Mil Cien,** Apt. 1100, Panama. **L.P:** Owner: J. Arias.

27) **R. Provincias,** Chitré – 28) **Cadena Universal,** Panama – 29) **R. Mia de Colon.**

30) **C. de Ondas Chiricanas,** Apt. 172, Panama. **L.P:** Owner: E. del C. Calvo.

31) **R. El Mundo,** Apt. 1566, Panama. **L.P:** Owner: M.P. de Valdéz.

32) **R. David,** Apt. 328, David. **L.P:** Owner: F. Moncada Luna.

33) **R. Nacional,** Apt. 552, Panama – 34) **Radio la Tribuna** – 35) **La Voz del Vigia,** Aguadulce.

36) **R. Reforma,** Apt. 1201, Chitre. **L.P:** Owner: P. Solis Villalaz. **D.prgr:** 11.00–04.00. **N.** 11.00, 11.50, 17.00, 18.00, 00.03 – **int-sig:** Gong. **V.** by QSL-card and letter – 37) **Ondas Centrales,** Santiago. **L.P:** Owner: H. Santacoloma – 38) **R. Selecta,** Apt. 4369, Panama.

39) **La Voz de Almirante,** Ca. 6a y Av. N, Almirante. **L.P:** Dir. Gen: N.O. Dosman H. **d.prgr:** 16.00–19.00, 22.00–04.00. Sun. 15.00–24.00 – **N.** 18.00. **English:** Mon 23.45, Tues 22.45, Wed/Fri 00.15, Sun 16.15. **Int-Sig:** Chimes.

40) **R. Independiente,** Apt. 4545, Panama – 41) **La Voz de la Victor,** Apt. 33, Colon. **L.P:** J. Jaén y Jaén – 42) **R. Exito,** Chorrera. **L.P:** Owner: L. Robles – 43) **R. Variedades,** Panama.

PUERTO RICO (U.S. Territory)

L.T: GMT–4 h – **Pr.L:** Spanish, English.

BROADCASTERS ASSOCIATION OF PUERTO RICO

ADDR: P.O. Box 10144, Santurce.

STATIONS: All st's comm. exc. 11) – St's allowed to operate as many hrs as they wish. [1]=also FM.

	Call	kc	kW		Call	kc	kW		Call	kc	kW
1)	WPAB	550	5/1	13)	WITA	1030	1	25)	WUNO	1320	5/1
2)	WKAQ	580[1]	5	14)	WMIA	1070	0.5	26)	WGFR	1340	0.25
3)	WAEL	600	1	15)	WRJS	1090	0.25	27)	WIVV	1370	1
4)	WKYN	630	1	16)	WVJP	1110	0.25	28)	WISA	13901	0.5
5)	WAPA	680	10	17)	WITA	1140[1]	0.5	29)	WHOA	1400	0.25
6)	WKJE	7101	0.5	18)	WORA	1150[1]	1	30)	WEUC	1420	1
7)	WIAC	730	10	19)	WLEO	1170	0.25	31)	WNEL	14301	0.5
8)	WKVM	810	25	20)	WNIK	1230	0.25	32)	WMDD	1490	0.25
9)	WABA	850	0.5	21)	WALO	1240	0.25	33)	WMNT	1500	0.25
10)	WPRP	910	5	22)	WISO	1260	1	19)	WKFE	1550	0.25
11)	WIPR	940[1]	10	23)	WCMN	1280	1	34)	WRSJ	1560	5
12)	WPRA	990	10	24)	WTIL	1300	1	35)	WXRF	1590	1

D.PRGR: 10.00 to approx. 04.00, exc. where indicated.

1) **R. WPAB,** P.O. Box 786, Poncé. **D.Prgr:** 10.00–02.00. **English:** 15.30–18.00. **V.** by letter.

2) **El Mundo Broadc. Corp,** 654 Poncé de Leon Av, San Juan.

3) **R. WAEL,** Box 297, Mayaguez – 4) **Quality Broadc. Corp,** Rio Piedras – 5) **R. WAPA,** Box 4563, San Juan.

6) **R. WKJB,** Box 1293, Mayaguez.

7) **R. WIAC,** 261 Poncé de Leon Av, San Juan.

8) **American Colonial Broadc. Corp,** Box 4189, San Juan.

9) **R. WABA,** Box 188, Aguadilla. **L.P:** Mgr: F. Bonnet.

10) **Voice of Puerto Rico,** Box 430, Poncé. **Ann:** "Transmite WPRP, Poncé, Puerto Rico, 910kc en el cuadrante de su radio".

11) **Dept. of Education of P.R,** P.O. Box 909, Hato Rey. **D.Prgr:** 11.00 (Sun 12.00)–02.15. **N:** 14.00, 16.00, 19.00, 22.00. **Ann:** "These are r. st. WIPR and WIPR-FM in San Juan, Puerto Rico". **V.** by QSL-card.

12) **R. WPRA,** Box 869, Mayaguez. **D.Prgr:** 24 h.

13) **Electronic Enterprises Inc,** San Juan.

14) **Abacoa Radio Corp,** Barrio San Daniel, Insular rd 2, Arecibo. **L.P:** Mgr: C. M. Pirallo. **D.Prgr:** 09.30–04.00.

15) **R. Station WRSJ,** San German – 16) **Borinquen Broadc. Corp,**

Box 207, Caguas. **D.Prgr:** 12.00–03.00.
17) **Electronic Enterprises Inc,** Box 2792, San Juan. **D.Prgr:** 04.00–16.00.
18) **Radio Americas Corp,** Box 43, Mayaguez. **D.Prgr:** 10.00–02.00.
19) **Poncé Broadc. Corp,** Box 1526, Poncé. **D.Prgr:** 09.30–04.00. **V.** by QSL-card.
20) **Arecibo Radio Corp,** Box 1075, Arecibo. **D.Prgr:** 10.00–03.00. **V.** by letter. **Rp.**
21) **R. WALO,** Desengano Str, Humacao.
22) **South P.R. Broadc. Corp,** Box 2023, Poncé.
23) **Caribbean Broadc. Corp,** Box 7, Arecibo.
24) **Mayaguez Radio Corp,** Box 1346, Mayaguez. **D.Prgr:** 10.00–04.00. **V.** by QSL-card or letter.
25) **San Juan Broadc. Corp,** Box Q, Hato Rey.
26) **Jaicoa Broadc. Corp,** Box 863, Aguadilla.
27) **Calvary Baptist Mission of P.R,** Box 338, Vieguez Island. **L.P:** Dir. Gen: D. Luttrell. Dir. Tec: G. Carr. **D.Prgr:** 09.30–03.00. **N:** 11.00, 17.00, 23.00, 02.00. **V.** by letter.
28) **R. Station WISA,** Isabela. **D.Prgr:** 10.00–03.00. **V.** by letter.
29) **Continental Broadc. Corp,** 566 Poncé de Leon Av, San Juan. **D.Prgr:** 10.30–05.00.
30) **Catholic University of Puerto Rico,** Service Assn. Campus, Poncé.
31) **Atlantic Broadc. Corp,** Box 487, Caguas. **D.Prgr:** 24 h. **N:** Every h on the h. **F.Pl:** 5kW.
32) **R. WMDD,** Box 387, Fajardo. **D.Prgr:** 10.00–02.00.
33) **R. St. WMNT,** Manati.
34) **R. San Juan,** P.O. Box 5627, San Juan. **D.Prgr:** 09.30–05.00.
35) **Guayama Broadc. Co,** Hostos 42-N, Guayama. **D.Prgr:** 10.30–03.00. **V.** by QSL-card.
36) **Fidelity Broadc. Corp,** J-one-Violeta Str, Rio Piedras.
37) **P.R. Music Services,** P.O. Box 5369, Puerto de Tierra.
38) **Supreme Broadc. Co. of P.R. Inc,** First-Federal Bldg, Stop 23, Santurce, San Juan – 39) **Bestov Broadc. of P.R. Inc,** Box 4504, San Juan.

ARMED FORCES RADIO & TV SCE: see USA.

SWAN ISLAND

L.T: GMT–6 h – **Pr.L:** Spanish.

RADIO AMERICAS (Comm).
ADDR: P.O. Box 352, Miami 1, Fla. **Te:** 444-8287.
STATIONS: 1160kc 257.5m 50kW – 6000kc 50.00m 7.5kW.
D.PRGR'S in Spanish: 10.00–13.30, 22.00–07.00.
ANN: Sp: "Esta es R. Americas, La Voz de la Verdad para todo el Continente" – **INT-SIG:** First six notes of America Immortal lyre – **V.** by QSL-card. **Rp.** Records accepted.

TRINIDAD

L.T: GMT–4 h – **Pr.L:** English.

RADIO TRINIDAD (Comm.)
FI: By adv and licences – **Fee:** $2.50 – **AD:** 10 min's per h **ADDR:** Broadc. House, 11B, Maraval Rd, Port-of-Spain. **Cable:** Broadcast. **Te:** 21151 – **L.P:** Gen. Mgr: B.F. Bonsor, St. Mgr: P.E.M. Hesketh. Dir. Tec: E.R. McDowell. Dir. Prgr: Mrs. J. Gonsalves.
STATIONS: 730kc 410m 20kW – FM: 95.1Mc 1kW.
HOME SCE. in English: D 10.00–03.15 *=Wrp.
N: 10.00, 10.45, 11.00*, 12.00, 13.00*, 14.00, 15.00, 16.00*, 16.30, 17.00, 18.00*, 19.00, 20.00*, 21.00, 22.00, 23.00, 23.45, 01.45, 02.00*, 02.15, 03.00* – **ANN:** "This is R. Trinidad, first with the news" – **V.** by letter. Records accepted.

RADIO GUARDIAN (Comm.)
FI: By adv – **AD:** 10 min. per h exc. during 90 min. reserved for Go. use.
ADDR: 17 Abercromby Street, Port of Spain. **Cable:** Voice. **Te:** 32618
L.P: St. Mgr: P. Pitts. Dir. Tec: F. Thompson.
STATIONS: 610kc 10kW – FM 98.9Mc 0.25kW.
HOME SCE. in English: 09.56–03.07. **N:** on the h – **Go. prgr:** 00.00 – **Wrp:** On the ½ h – **ANN:** "This is R. Guardian, The Voice of Trinidad, Tobago" – **V.** by letter.

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TURK & CAICOS ISLANDS (British)

L.T: GMT–5 h – **Pr.L:** English.

RADIO STATION VSI8
ADDR: Cable & Wireless (West Indies) Ltd, Mercury House, Grand Turk. **Te:** 2. **Cable:** Empiregram.
L.P: St. Mgr: G. Price. Dir. Tec: D.A. Gregory.
STATION: VSI8 4560kc 65.79m 0.2kW.
D.PRG'S: N. in English: 18.30 (10 to 20 min's). Local N. issued by the Go – **ANN:** "R. St. VSI8 owned and operated by Cable & Wireless (W.I.) Ltd – **V.** by letter, Rp.

VIRGIN ISLANDS (American)

L.T: GMT–4 h – **Pr.L:** English.

ST. CROIX
RADIO AMERICAN WEST INDIES, INC. (Comm.)
ADDR: P.O. Box 931, Christiansted St. Croix. **Cable:** Rawi. **Te:** 223.
STATION: WIVI 970kc 1kW: 09.00–04.00.
D.PRGR: N. (English): Every h of the h – Spanish: 18.00–20.00. **V.** by QSL-card – **F.PL:** 5kW+FM.

ST. THOMAS
RADIO STATION WSTA (Comm.)
ADDR: P.O. Box 538, Charlotte Amalie, St. Thomas. **Cable:** WSTA. **Te:** 774.
STATION: 1340kc 0.25kW – **D.PRGR:** 10.00–04.00 – **V.** by letter. Records accepted – **F.PL:** 1kW.

RADIO STATION WBNB (Comm.) – **ADDR:** Box 1947, St. Thomas – **Te:** 1050. **Cable:** WBNB.
STATION: 1000kc 1kW – **D.PRGR:** 10.30(Sun 12.00)–04.00.

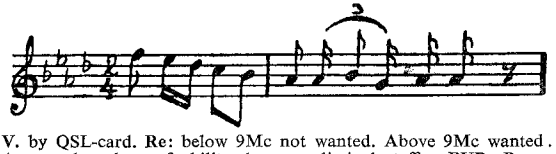
WINDWARD ISLANDS

L.T: GMT–4 h – **Pr.L:** English.

WINDWARD ISLANDS BROADCASTING SERVICE (Go.)
FI: By state and by license fees – **ADDR:** St. George's Grenada W.I. **Cable:** Broadcasts. **Te:** 4251 – **L.P:** Man. Dir: A.C.G. Palmer, M.B.E. Dir. Tec: R.A. Smith, Memb. I.R.E.E.
HOME SCE: a) Grenada, b) Dominica, c) St. Vincent, d) St. Lucia.

St. George's	a) 540kc 0.5kW	15.45–17.45, 19.59–02.15
Castries	d) 685kc 0.5kW	
Roseau	b) 695kc 0.5kW	
Kingston	c) 705kc 0.5kW	

Short Waves (St. George's)
2460kc 121.9 m 5kW: 22.40–02.15 (1)
3280kc 91.40m 5kW: 22.40–02.15
5010kc 59.88m 5kW: 15.45–17.45, 19.59–02.15
9550kc 31.41m 5kW: 15.45–17.45
11895kc 25.22m 5kW: 19.59–20.45 (2)
15085kc 19.89m 5kW: 19.59–22.35 (3), 19.59–21.45 (4)
1) Dec. to Mid-Feb; 2) Mid-Nov to Mid Feb; 3) Apr- Sept; 4) Oct to Mid-Nov & Mid-Feb to April.
OVERSEAS SCE (to British Isles):
Special broadc. covering International cricket on 15085kc 15.00–19.00 and on either 11895 or 15085kc 19.00–22.30 depending on time of year – **ANN:** "This is the Windward Islands Broadc Sce".
INT-SIG: A typical calypso phrase played on the "ping-pong", an indigenous instrument made from the top of a steel drum.



V. by QSL-card. **Re:** below 9Mc not wanted. Above 9Mc wanted. Answered to best of ability due very limited staff – **PUB:** Prgr.-sched. (weekly).

RADIO CARIBBEAN (Comm.)
FI: By adv – **AD:** Max. 10 min. per h – **ADDR:** P.O. Box 121, Castries, St. Lucia W.I. **Cable:** Caradio. **Te:** 154 – **L.P:** Mgr: T.K. Archer. Head of French Prgr's: C. Baylet.
STATION (System: Collins): 840kc 10kW.
HOME SCE. in English, French: 10.30 (Sun 13.00)–01.30. **N:** Every h on the h in French; English: 13.00, 20.00 (BBC) – **L.L:** "Keep up your English": Tues, Thurs, Sat 22.00 – **Request Prgr:** French: 23.30, English: 20.45 – **ANN:** E: "This is R. Caribbean International St. Lucia broadc. on a freq. of 840kc in the medium wave band". F: "Ici R. Caraibes International, Ste. Lucie, emettant sur 840kc". – **V.** by letter. **Rp.** Records accepted – **F.PL:** A 10kW tr. to broadc. in English all day in addition to French prgr's.

SOUTH AMERICA

ARGENTINA

L.T: March–Oct: GMT−4 h; Oct–Feb: GMT−3 h – **Pr.L:** Spanish.

SECRETARIA COMUNICACIONES

ADDR: Sarmiento 151, Buenos Aires. **Cable:** Gentel Baires. **Te:** 31-5031 – **L.P:** Secr. of Comunicaciones: A. Pagés Larraya. **Dir. Gen:** (Radiodiffusión): A. E. Lapieza Elli.

R. NACIONAL (Servicio Oficial de Radiodifusion – Go.)

ADDR: Ayacucho 1556, Buenos Aires. **Te:** 84-2021 – **L.P:** Dir. Gen: L. A. Quesada. **Dir. Tec:** J. M. Serrano.

HOME SERVICE: Short Waves:

Call	kc	m	kW	Name and h of tr.
LRA31	6060	49.50	50	Buenos Aires: 12.00–05.00
LRA34	6180	48.54	10	Mendoza: 15.00–04.00
LRA33	15345	19.55	100	Buenos Aires: 15.00–20.00

Medium Waves: °=Short Wave.

Call	kc	kW	Name	h of tr.
LRA10	620	5	Ushuala	15.00–03.00
LRA9	670	5	Esquel	15.00–04.00
LRA4	690	10/5	Salta	14.00–04.00
LRA3	730	20/5	Santa Rosa	14.00–24.00
LRA7	750	50	Córdoba	12.00–04.00
LRA8	780	5	Formosa	13.00–04.00
LRA	°870	100	Buenos Aires	12.00–04.00
LRA11	900	5	Comodoro Rivadavia	23.00–04.00
LRA6	°960	20/5	Mendoza	13.00–04.00
LRA5	1310	5	Rosario	12.00–04.00

Under construction: LRA13 560kc (Bahia Blanca) 10/3kW – LRA12 620kc (Santo Tomé) 5kW.

D.PRGR: N: 12.00, 16.00, 24.00 – **V.** by QSL-card.

INTERNATIONAL SERVICE

ADDR: Radiodif. Argentina al Exterior (RAE), Sarmiento 151, Buenos Aires – **L.P:** Dir: A. Cristiani.

STATIONS: *=R. Belgrano.

Call	kc	m	kW	Call	kc	m	kW
LRY1	*6090	49.26	40	LRA35	11710	25.62	100
LRA32	9690	30.90	100	LRY2	*11780	25.47	7

TO JAPAN: Japanese D. 09.00–10.00 & 13.00–14.00 on 9690kc (also on 6090 & 11780kc with omnidirectional antenna for So. America).

TO EUROPE: 19.00–23.00 on 6090/11710/11780kc (19.00 Spanish, 20.00 German, 21.00 Italian, 22.00 French); 23.00–24.00 on 11710kc (English).

TO NO. AMERICA (East): 00.00–02.00 on 9690kc, 02.00–03.00 on 9690/11780kc, 03.00–04.00 on 6090–9690/11780kc (00.00 Portuguese, 01.00 Spanish, 03.00 English).

TO NO. AMERICA (West): 04.00–07.00 on 6090/9690/11780kc (04.00 Spanish, 06.00 English).

Prgr's: N. Argentina music, Folk music, Mailbag (every Thurs).

ANN: Sp: "Aqui Argentina", G: "Hier spricht Argentinien", I: "Qui Argentina", F: "Ici l'Argentine", E: "This is Argentina Calling", P: "Aqui Argentina" – **V.** by QSL-card.

OFFICIAL STATIONS (Go.)

Call	kc	kW	Call	kc	kW	Call	kc	kW
1) LS1	710	50	5) LS11	1270	30/5	9) LT21	1520	0.1
2) LU14	730	5	6) LV17	1360	0.25	10) LT19	1550	0.25
3) LT10	1020	10/5	7) LV18	1370	0.25	11) LT24	1550	0.1
4) LT17	1250	5/2	8) LR11	1390	5/2.5	12) LR7	1570	0.1

1) **R. Municipal,** Arturo Toscanini 1168, Buenos Aires – **D.Prgr:** 10.00–06.00 – **L.P:** V. Tedin – 2) **R. Provincia de Santa Cruz,** Roca 825, Rio Gallegos – **D.Prgr:** 12.00–06.00 – **L.P:** J. Grumblat – 3) **R. Universal del Litoral,** 9 de Julio 3550, Santa Fé – **L.P:** Dir: L. Bonaparte – **D.Prgr:** 16.00–05.00 – 4) **R. Provincia de Misiones,** Casa de Gobierno, Posadas – **D.Prgr:** 14.00–02.00 – **L.P:** Dir: F. Damus.

5) **R. Provincia de Buenos Aires,** Ca. 10 y Av. 53, La Plata. **Te:** 3-9158 – **L.P:** Dir: M. Eloy del Rio. **Dir. Tec:** M. Angel Cadut – **D.Prgr:** 11.00–04.00 – **V.** by QSL-card or letter – 6) **R. Municipal de Cordoba,** Marcelo T. de Alvear y 27 de Abril, Córdoba – **L.P:** Dir: L. Perez – **D.Prgr:** 12.00–00.30 – 7) **R. Municipal de San Rafael,** San Rafael, Mendoza – **L.P:** Dir: A. Maslup – **D.Prgr:** 14.00–18.00 – 8) **R. Universidad de La Plata – L.P:** Dir: J. Sager – **D.Prgr:** 20.00–04.00 – 9) **R. Municipal de Alvear,** Alvear, Corrientes – 10) **R. Municipal de Santo Tomé,** Santo Tomé, Corrientes – 11) **R. Municipal de Rafaela,** Rafaela, Santa Fe – 12) **R. Municipal de Avellaneda,** Avellaneda, Buenos Aires.

COMMERCIAL STATIONS

ASOCIACION RADIODIFUSORAS PRIVADAS ARGENTINAS (A.R.P.A.)

ADDR: Cangallo 1561, Buenos Aires. **Cable:** Arpair. **Te:** 354412. **L.P:** Pres: H. E. Long.

COMISION ADMINISTRADORA DE EMISORAS COMERCIALES Y TV (Go+comm st's administration) – **ADDR:** Cerrito 941, Buenos Aires. **Te:** 42-0411.

Short Waves: Location: Buenos Aires (all Go. operated).

Call	kc	m	kW	Name	h of tr.
1) LRS2	5985	50.13	1	R. Splendid	11.00–03.00
2) LRY1	6090	49.26	40	R. Belgrano	11.30–08.00
3) LRX1	6120	49.02	10	R. El Mundo	12.00–05.00
3) LRX	9660	31.06	7	R. El Mundo	10.00–13.45
3) LRX2	9710	30.90	7	R. El Mundo	14.00–05.00
1) LRS1	9740	30.79	1	R. Splendid	11.00–03.00
2) LRY2	11780	25.47	7	R. Belgrano	10.00–08.00
1) LRS	11880	25.25	1	R. Splendid	11.00–03.00
3) LRU	15290	19.62	10	R. El Mundo	10.00–11.45

Medium Waves: °=Short Wave.

Call	kc	kW	Call	kc	kW	Call	kc	kW
4) LV1	560	10/3	1) LR4	°910	50	43) LU10	1240	10/5
5) LT15	560	5/3	2) LR3	°950	100	47) LV13	1250	5
6) LW1	580	10/5	27) LW8	960	20/5	48) LT9	1260	5/2.5
7) LV12	590	10/5	28) LV2	970	15/5	49) LT11	1300	3/1.5
8) LS4	590	10/5	29) LR5	990	50	50) LU13	1300	10/1.5
9) LU8	590	5/1	30) LT4	1010	25/3	51) LU6	1320	5/2.5
10) LV10	620	20/5	31) LV16	1010	10/3	52) LT14	1330	5/2.5
11) LS5	630	20/4	32) LS10	1030	25/5	53) LU11	1340	0.25
12) LV14	630	5/1.5	3) LR1	°1070	100	54) LS6	1350	20/5
13) LU4	640	5	33) LT5	1080	10/5	55) LT12	1360	3/1.5
14) LV15	640	1	34) LV5	1090	15/5	56) LT16	1370	5/3
15) LU9	670	25/5	35) LR2	1110	20/5	57) LU17	1430	0.25
16) LT7	670	5/1	36) LU7	1120	10/5	58) LU15	1440	0.25
17) LU12	680	25/2	37) LU5	1130	20/5	59) LU16	1460	0.25
18) LV6	680	10/5	38) LV3	1150	10	60) LW2	1460	0.25
19) LW7	730	5/1	39) LT3	1160	10/5	61) LT13	1470	0.25
20) LV8	780	10/5	40) LV11	1170	5	62) LU19	1470	0.25
21) LR6	790	50	41) LR9	1190	5	63) LW4	1510	0.25
22) LU2	820	10/5	42) LW3	1190	10/5	64) LU18	1510	0.25
23) LT8	830	10/5	46) LU3	1200	25/5	65) LU20	1510	0.25
24) LV9	830	10/5	44) LT6	1200	5/3	66) LU21	1510	0.25
25) LV4	840	5	45) LT2	1230	15/5	67) LT18	1550	0.25
26) LV7	900	10/5						

Priv. st's: 4), 5), 8), 10), 11), 15), 16), 17), 18), 22), 24), 30), 31), 32), 43), 46), 48), 50), 53), and 57)–67).

Short Waves:

1) Uruguay 1237, Buenos Aires – **L.P:** Dir: R. Arancibia. **Dir. Tec:** E. Grazziani – **D.Prgr:** 09.30–05.00. **N:** 10.00, and every h on the h from 11.00 – **Ann:** "LR4, R. Splendid de Buenos Aires, con sus ondas cortas, LRS, LRS1 y LRS2 de la Red Argentina de Emisoras Splendid" – **Int-Sig:** 4 notes on electronic gong – **V.** by QSL-card.

2) Cerrito 941, Buenos Aires – **L.P:** Dir: E. Narboni. **Dir. Tec:** M. Koebler – **D.Prgr:** 09.00–04.15. **N:** 09.00, 11.00, 15.00, 16.00, 20.00, 22.00, 01.00, 03.00, 04.00 – **Ann:** "Transmite LR3 R. Belgrano de Buenos Aires, con sus ondas cortas LRY, LRY1 y en circuito de emisoras" – **Int-Sig:** 4 notes on vibraphone – **V.** by QSL-card.

3) Maipú 555, Buenos Aires – **L.P:** Dir: R. Medina. **Dir. Tec:** C. Cutler – **D.Prgr:** 09.00–04.00 – **Ann:** "LR1, R. El Mundo de Buenos Aires y su Red Azul y Blanca de Emisoras Argentina" – **Int-Sig:** Gong – **V.** by QSL-card.

Medium Waves: D.Prgr's: 10.00–04.00 exc. where indicated.

4) **R. Colon,** Mendoza 369, San Juan – **L.P:** Dir: J. Graffigna – **V.** by letter. Records accepted.

5) **R. Concordia,** La Rioja 622, Concordia, Entre Rios – **L.P:** Dir: C. Pinola – **D.Prgr:** 09.30–03.00, Sat 09.30–04.00.

6) **R. Univ. de Cordoba,** Rivera Indarte 170, Córdoba – **L.P:** Dir: F. Garzón M. – **D.Prgr:** 09.30–04.30.

7) **R. Independencia,** Rivadavia 118, Tucumán – **L.P:** Dir: P. Soage – **D.Prgr:** 10.30–04.00 – 8) **R. Porteña,** Rivadavia 827, Buenos Aires – **L.P:** Dir: T. Bidegain – **D.Prgr:** 24 h – 9) **R. Bariloche,** San Carlos de Bariloche, Rio Negro – **L.P:** Dir: C. Lammuniere – **D.Prgr:** 12.00–02.00 – 10) **R. de Cuyo,** Av. San Martin y G.ral Paz, Mendoza – **L.P:** Dir: M. Fernandez R – **D.Prgr:** 24 h.

11) **R. Rivadavia,** Arenales 2467, Buenos Aires – **L.P:** Dir: J. Monk – **D.Prgr:** 24 h – 12) **R. La Rioja,** Mitre 743, La Rioja – **L.P:** R. A. Flores – **D.Prgr:** 11.00–04.00.

13) **R. Comodoro Rivadavia,** Moreno 765, Comodoro Rivadavia – **L.P:** Dir: F. Balbuena – **D.Prgr:** 09.00–05.00.

14) **R. Villa Mercedes,** Balcarce 470, Villa Mercedes, San Luis – **L.P:** Dir: J. Moreno – **D.Prgr:** 10.00–03.00.

15) **R. Mar del Plata,** Córdoba 1861, Mar del Plata – **L.P:** Dir: E. Marin P – **D.Prgr:** 24 h – 16) **R. Provincia de Corrientes,** Rioja 743, Corrientes – **L.P:** Dir: J. F. Gomez – **D.Prgr:** 24 h – 17) **R. Rio**

Gallegos, Av. San Martin 461, Rio Gallegos, Santa Cruz – **L.P:** A. R. Segovia – **D.Prgr:** 12.00–03.00 – 18) **R. Nihuil,** Rioja 1239, Mendoza – **L.P:** Dir: J. Balmaceda – **D.Prgr:** 10.00–05.00.
19) **R. Catamarca,** Rivadavia 741, Catamarca – **L.P:** Dir: N. Elias M – **D.Prgr:** 11.00–03.00 – 20) **R. Libertador,** Rioja 1484, Mendoza – **L.P:** Dir: M. Houlne – 21) **R. Mitre,** Arenales 1925, Buenos Aires – **L.P:** Dir: F. Ferretti – **D.Prgr:** 24 h – 22) **R. Bahia Blanca,** Sarmiento 54, Bahia Blanca – **L.P:** Dir: D. J. de Massot – **D.Prgr:** 10.00–07.30, Sat 24 h – 23) **R. Rosario,** Córdoba 1825, Rosario – **L.P:** Dir: H. Pavia – **D.Prgr:** 10.30–04.00, Sat 10.30–05.00.
24) **R. Güemes,** Dean Funes 28, Salta – **L.P:** Dir: M. P. Tato – **D.Prgr:** 10.00–05.00.
25) **R. San Rafael,** Irigoyen y Francia, San Rafael, Mendoza – **L.P:** Dir: S. Illa – **D.Prgr:** 10.00–04.00.
26) **R. Tucumán,** Mendoza 273, Tucumán – **L.P:** Dir: F. Etchegoin.
27) **R. Jujuy,** Ramirez de Velazco 253, Jujuy – **L.P:** Dir: C. Figueroa.
28) **R. La Voz de la Libertad,** Maipú 166, Córdoba – **L.P:** Dir: D. D. de Aguero – **D.Prgr:** 09.30–04.30.
29) **R. Excelsior,** Rivadavia 827, Buenos Aires – **L.P:** Dir: J. Grone – **D.Prgr:** 10.00–05.00 – 30) **R. Misiones,** Bolivar 322, Misiones – **L.P:** Dir: C. Madelaire – **D.Prgr:** 08.00–04.00 – 31) **R. Ranquel,** Colón 78, Rio Cuarto, Córdoba – **L.P:** J. J. Lasa – **D.Prgr:** 08.00–04.00.
32) **R. Libertad,** Florida 165, Buenos Aires – **L.P:** Dir: O. Guglielmino – **D.Prgr:** 09.00–04.00.
33) **R. Chaco,** 9 de Julio 1855, Resistencia, Chaco – **L.P:** Dir: J. Sobrado – **D.Prgr:** 09.00–04.00, Sat 09.00–05.00.
34) **R. Sarmiento,** Mendoza 466, San Juan – **L.P:** Dir: J. A. Ciriani.
35) **R. Argentina,** Santa Fé 2043, Buenos Aires – **L.P:** Dir: R. A. Sotomayor – **D.Prgr:** 09.00(Sun 10.00)–04.00.
36) **R. General San Martin,** Alsina 247, Bania Blanca – **L.P:** Dir: R. Rossell – 37) **R. Splendid,** Juan B. Alberdi 189, Neuquén – **L.P:** Dir: R. Sande – **D.Prgr:** 09.59–03.30.
38) **R. Cordoba,** San Martin 60, Córdoba – **L.P:** Dir: J. J. Lasa.
39) **R. Cerealista,** Balcarce 840, Rosario – **L.P:** Dir: A. Ciampoli.
40) **R. del Norte,** Libertad 251, Santiago del Estero – **L.P:** Dir: R. R. Lobos – **D.Prgr:** 10.00–03.00.
41) **R. Antártida,** Arenales 1925, Buenos Aires – **L.P:** Dir: F. Ferretti – **D.Prgr:** 10.00–03.00 – 42) **R. Splendid Tucumán,** Mendoza 225, Tucumán – **L.P:** Dir: J. C. Fagaldo – **D.Prgr:** 10.00–05.00.
43) **R. del Sur,** Lamadrid 116, Bahía Blanca – **L.P:** Dir: H. Long – **D.Prgr:** 10.30–04.00 – 44) **R. Genaro Berón de Astrada,** Mariano I. Lloza 231, Goya, Corrientes – **L.P:** Dir: M. Garcia G – **D.Prgr:** 10.00–03.00.
45) **R. Splendid, Rosario,** Santa Fé 1388, Rosario – **L.P:** Dir: P. Spoletti – **D.Prgr:** 10.00–07.00.
46) **R. Azul,** Av. Mitre 819, Azul – **L.P:** Dir: J. Berrero.
47) **R. San Luis,** Rivadavia 563, San Luis – **L.P:** Dir: O. J. Caridad – **D.Prgr:** 10.00–03.00.
48) **R. Santa Fé,** San Martin 2685, Santa Fé – **L.P:** Dir: R. Savio – **D.Prgr:** 24 h.
49) **R. Splendid,** Onésimo Leguizamón 269, Concepción del Uruguay, Entre Rios – **L.P:** Dir: J. Korach – **D.Prgr:** 10.00–03.30.
50) **R. Necochea,** Belgrano 3222, Necochea – **L.P:** Dir: R. Rico – **D.Prgr:** 09.30–04.00.
51) **R. Atlántica,** Cordoba y San Martin, Mar del Plata – **L.P:** Dir: J. A. Mendiri – **D.Prgr:** 09.30–06.00. N. every 15 min. **FM:** 148Mc, 50kW – V. by letter – **F.Pl:** 10 kW – 52) **R. General Urquiza,** Rivadavia 64, Parana, Entre Rios – **L.P:** Dir: C. M. W. Fox.
53) **Radioemisora del Oeste, Av.** Pedro Garcia Salinas s/no, Trenque Lauquen – **L.P:** Dir: R. Saez Adrizola – **D.Prgr:** 10.30–02.30.
54) **R. del Pueblo,** J. A. Pacheco de Melo 2178, Buenos Aires – **L.P:** Dir: C. Aris B – **D.Prgr:** 10.00–03.00, Sat 10.00–05.00.
55) **R. General Madariaga,** Paso de los Libros, Corrientes – **L.P:** Dir: J. J. Varela – **D.Prgr:** 10.00–03.00(Sat 04.00).
56) **R. Splendid,** J. J. de Urquiza 585, Presidencia Roque Saenz Peña – **L.P:** Dir: R. Galotto – **D.Prgr:** 09.00–03.30, Sat 09.00–04.00.
57) **R. Golfo Nuevo,** B. Mitre y Estivariz, Puerto Madryn, Chubut – **L.P:** Dir: E. Cassani – **D.Prgr:** 11.00–03.00.
58) **R. Viedma,** Rivadavia 336, Viedma – **L.P:** Dir: O. Liccardi – **D.Prgr:** 12.30–01.30.
59) **R. Rio Negro,** Reconquista 135, Villa Regina, Rio Negro – **L.P:** Dir: D. López – **D.Prgr:** 12.45–01.00.
60) **R. Tartagal,** San Martin 245, Tartagal, Salta – **L.P:** Dir: N. S. Martinez Gil – **D.Prgr:** 10.00–01.00.
61) **R. Oberà,** Jujuy 81, Oberá, Misiones – **L.P:** Dir: H. Amable – **D.Prgr:** 10.00–01.00.
62) **R. Cipolletti,** Sarmiento 160, Cipolletti, Rio Negro – **L.P:** Dir: R. Rost – **D.Prgr:** 10.00–03.00 – 63) **R. Oran,** 9 de Julio 163, San Ramón de la Nueva Orán, Salta – **L.P:** Dir: G. Bernard – **D.Prgr:** 10.00–02.00 – 64) **R. El Valle,** 25 de Mayo 880, General Roca, Rio Negro – **L.P:** Dir: F. Zarraga – **D.Prgr:** 10.00–02.00.
65) **R. Chubut,** Italia 47, Trelew, Chubut – **L.P:** Dir: T. Boric – **D.Prgr:** 11.00–03.00 – 66) **R. Golfo San Jorge,** Italia 947, Comodoro Rivadavia – **L.P:** Dir: H. Ferro – **D.Prgr:** 10.00–01.00.
67) **R. Eldorado,** Eldorado, Misiones (under construction) – **L.P:** Dir: G. Esquivel.

BOLIVIA

L.T: GMT – 4 h – **Pr.L:** Spanish.

DIRECCION GENERAL DE RADIOCOMUNICACIONES

Departemento de Radiodifusion, La Paz.
Te: 22436 – **L.P:** Dir. Gen: A. Salces Arce.

ASOCIACION BOLIVIANA DE RADIOFUSORAS,

Casilla 2431, La Paz – **L.P:** Pres: Rvd. Gramunt S. J.

STATIONS: All st's comm. exc. 5), 8) (Rel), 15) (Go), 18) (Cultural), 23), 27), 35).

Short Waves: *=inactive.

	Call	kc	m	kW	Name and h of tr.
1)	CP74	4785	62.70	1	R. Indoamérica, Potosi: 11.30–03.00
2)	CP73	4795	62.57	1	R. Nueva América, La Paz: 10.40–05.00.
3)	CP70	4825	62.18	0.3	R. Grigota, Santa Cruz: 10.00–03.00
4)	CP66	*4845	61.92	1	R. Centenario, Santa Cruz
5)	CP59	4855	61.79	1	R. Cobija, Cobjia: 10.00–03.00
6)	CP77	4885	61.45	1	R. Sararenda, Camiri
7)	CP75	4985	60.75	5	La Cruz del Sur, La Paz: 10.45–03.00
8)	CP5	5955	50.38	1	R. Pio XII, Llallagua: 15.00–04.00
9)	CP44	5975	50.21	1	R. Nacional LAB, Cochabamba: 12.00–03.00
10)	CP41	5995	50.04	1	R. Loyola, Sucre: 11.00–15.00, 16.00–19.00 21.00–24.00
11)	CP18	6055	49.55	1	R. El Condor, Oruro: 12.00–18.00, 22.00–03.00
12)	CP15	6125	48.98	1	R. El Condor, La Paz: 12.00–03.00
13)	CP30	6130	48.90	0.5	R. Prefectura, Santa Cruz: 15.00–18.00, 22.00–03.00
14)	CP12	b) 6155	48.74	1	R. Fides, La Paz: 16.00–14.00, 21.00–03.00
15)	CP9	c) 6185	48.50	1	R. Amauta, La Paz: 12.00–18.00, 21.00–03.00
16)	CP38	9505	31.56	5	R. Altiplano, La Paz: 12.00–23.00
17)	CP22	9605	31.23	5	R. Prefectura, Potosi: 12.00–18.00, 22.00–03.00
18)	CP6	d) 9555	31.50	10	R. Illimani, La Paz: 11.00–04.00
19)	CP21	9715	30.88	1	R. La Plata, Sucre: 12.00–18.00, 22.00–03.00
7)	CP39	11765	25.50	10	La Cruz del Sur, La Paz: 10.45–03.00
18)	CP7	11775	25.48	10	R. Illimani, La Paz

a) actually on 5985kc; b) on 6146kc; c) on 6340kc; d) on 9557kc.

Medium Waves: °=Short Wave. **Call:** CP—.

Call	kc	kW		Call	kc	kW		Call	kc	kW	
20) 33	580	0.5	4)	25	°1160	0.25	34)	26	1250	0.25	
21) 63	620	1	28)	78	1160	0.25	10)	51	°1300	0.3	
23) 34	680	5	29)	55	1200	0.25	14)	29	°1300	0.5	
7) 27	°730	5	30)	67	1200	0.25	22)	68	1300	1	
24) 56	780	0.25	19)	54	°1250	0.25	35)	45	1330	0.25	
25) 52	780	0.25	5)	47	°1250	0.25	36)	36	1330	0.25	
16) 35	°820	0.25	6)	17	1250	0.25	3)	24	°1340	0.5	
12) 20	°900	0.25	31)	16	1250	0.25	2)	8	°1470	1	
26) 28	900	0.25	1)	53	°1250	0.25	37)	1	1510	0.25	
15) 11	°960	0.25	9)	69	°1250	0.25	38)	80	1510	0.25	
27) 32	960	0.25	32)	14	1250	0.25	39)	76	1510	0.25	
18) 4	°1020	20	33)	65	1250	0.25	8)	50	°1550	1	

Short Waves:

1) Ca. Matos 35, Potosi.

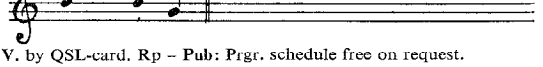
2) Cas. 2431, La Paz. **Te:** 2-5883 – **L.P:** Dir. Gen: R. Salmon – **D.Prgr:** N: 12.00, 17.00, 24.00. **Comm:** 17.20, 00.40.

3) Abaroa 315, Santa Cruz. **Te:** 2141. **Cable:** Grigota – **L.P:** Dir. Gen: D. Arteaga F – **D.Prgr:** N: 11.35, 16.15, 17.30, 24.00 – **Ann:** "CP24 y CP70 Estaciones Radiofonicas Grigota, La Voz del Oriente Boliviano" – V. by letter.

4) Argamosa 2, Santa Cruz – 5) Centre Accion Pandina, Cobija.

6) Correo Central, Soc. Ltda Sararenda, Camiri.

7) Cajón 1408, La Paz. **Te:** 2-5578. **FI:** By the Canadian Baptist Mission and the Methodist Church in Bolivia – **L.P:** Dir. Gen: F. Fortes. Dir. Tec: H. Hill – **D.Prgr:** N: 11.30, 12.00, 12.30, 13.55, 17.00, 23.00, 00.00, 02.00. **English:** D 02.30–03.00. "E. by R": Mon, Wed, Fri 23.15. **German:** W 11.15 – **Ann:** E: "This is CP27 and CP39, the Southern Cross Radio". **Sp:** "R. La Cruz del Sur, Luz que señala el camino de la vida". At 03.00 (s/off): "This is the Southern Cross Radio" – **Int-Sig:** Opens with "God of our Fathers", closes with "The Heavens are telling".



V. by QSL-card. Rp – **Pub:** Prgr. schedule free on request.

8) Cas. 464, Oruro – **L.P:** Dir. Gen: Rev. Padre G. Dicaire O.M.I. Dir. Tec: R. von Borries – **D.Prgr:** M: N. **in Spanish:** 10.10, 12.00.

13.00, 15.00, 16.20, 18.00, 22.00, 23.20, 02.00, 03.30. **N. in Quechua:** 08.40, 16.03, 22.50 – **V.** by letter. Records accepted.
9) Lloyd Aéreo Boliviano, Cochabamba.
10) Cas. 155, Sucre. **Te:** 1677. **Cable:** Radioloyola - **L.P:** Dir. Gen: R. Aguilo. Dir. Tec: J. Lora – **D.Prgr: N:** 12.15, 14.00, 15.30, 17.00, 18.30, 20.00, 22.00, 24.00, 01.45 – **Ann:** "Radioemisoras Loyola, Voluntad Católica de Bolivia" – **V.** by letter. Records accepted.
11) La Plata 1139, Oruro.
12) Av. Camacho 1471, La Paz. **Te:** 2-3070 – **L.P:** Dir. Gen: S. A. Sare. Dir. Tec: A. Sempértegui – **D.Prgr: N:** W 11.30, 16.30, 23.30, 02.30 – **Ann:** "Estas son CP15 y CP20, estaciones de ondas cortas y larga de R. El Condor, La Voz Ferrovario, desde La Paz, Bolivia" – **V.** by letter – 13) Santa Cruz.
14) Cas. 283, La Paz – **L.P:** Dir. Gen: J. Gramunt – **D.Prgr: N:** 12.00, 15.30, 16.45, 17.30, 23.00, 24.00, 01.00 – **Ann:** "R. Fides de La Paz, La Voz Catolica de Bolivia".
15) Cas. 586, La Paz – 16) Av. Camacho de 1468, La Paz. **Te:** 10906 – 17) Prefectura, Potosi – 18) Soc. Resp. Ltda-La Plata, 25 de Mayo 41, Sucre.

Medium Waves:

20) **R. Huayna Potosi,** Soc. Colectiva, H. Potosi, La Paz.
21) **R. San Gabriel,** Cas. 1071, La Paz – **L.P:** Dir. Gen: B. Ryan. Dir. Tec: D. Pruss – **D.Prgr:** 11.00–12.30, 15.00–17.00, 20.30–01.00 – **V.** by letter or QSL-card.
22) **R. San Rafael,** Cas. 546, Cochabamba – **L.P:** Dir. Gen: Rev. L. J. Sommer, MM. Dir. Tec: H. Cosio – **D.Prgr:** 10.00–03.00 – **N:** 11.30, 16.45, 23.00, 02.00. **N. in Quechua:** 23.30 – **Ann:** "Transmite CP68, R. San Rafael, La Voz Católica de Cochabamba" – **F.Pl:** 1kW.
23) **R. Mendez,** Av. 6 de Agosto 2008, La Paz – **D.Prgr:** 12.15–13.00, 14.30–18.00, 22.00–02.30.
24) **La Voz Minera,** Comando Movimiento Nacionalista Revolucionario Telamayo (Dep. Potosi) – 25) **R. Potosi,** Ca. Sucre 30 Potosi – **D.Prgr:** 13.00-15.00, 16.00–20.00, 00.30–03.00.
26) **R. Cochabamba,** Ca. 886, Cochabamba – 27) **Soc. Colectiva R. Sta. Cruz,** M. I. Salvatierra 234, Santa Cruz.
28) **R. Tunari,** Cochabamba – **L.P:** Dir: R.P. Luis Falch – 29) **Universidad Zénica,** Ca. 637, Oruro – 30) **R. Splendid,** Andrés Muños 2373, La Paz.
31) **Soc. Mercantil "Los Andes"**, 15 de Abril 828, Tarija.
32) **Emisoras "Unidas Ltda"**, Av. Comacho 1324, La Paz.
33) **R. Oruro,** Oruro – **D.Prgr:** 14.00–19.00, 21.00–03.00.
34) **Soc. Colectiva "Amboro"**, Libertad 348, Santa Cruz.
35) **R. Cultura,** Ca. 422, Cochabamba – 36) **R. Mercurio,** Oruro – 37) **R. Chuquisaca,** Cochabamba 154, La Paz – 38) **Soc. R. "Litoral"**, Ca. 1009, Cochabamba – 39) **La Voz Católica** – Vicariato Apostólico, Concepción.

BRAZIL

L.T: Eastern (Coastal): GMT−3 h (Su: GMT−2 h). Western: GMT −4 h (Su: GMT−3 h). Acre: GMT−5 h (Su: GMT−4 h) – **Pr.L:** Portuguese.

CONSELHO NACIONAL DE TELECOMUNIÇACÕES

(National Council of Telecommunications), Av. Pres. Wilson, 164-10° andar, Rio de Janeiro.

ASSOCIAÇÃO BRASILEIRA DE EMISSORAS DE RADIO E TELEVISAO,

Av. Rio Branco 4, salas 90–903, Rio de Janeiro, GB – **L.P:** Pres: Dr. J. de Medeiros Calmon. Vice Pres: Dr. F. Alcaraz Gomes, A. Ziller. Exec. Dir: R. Tavares. Secr: F. Parente.

STATIONS: Short Waves: *=inactive.

Call	kc	m	kW	Name	h ftr. o
1) ZYV38	2340	128.2	0.5	R. Educadora da Uberlandia	14.00–01.00
2) ZYB	2350	127.6	1	R. Dif. Itacoatiara	10.00–01.00
3)	2360	127.1	0.25	R. Dif. Parintins	10.00–01.00
4)	2370	126.1	0.25	R. Cl. Fluminense, Sao João de Mariti	12.00–01.00
5)	2380	126.0	0.25	R. Educadora de Limeira	09.00–02.00
6) ZYV71	2390	125.5	0.5	R. Por Um Mundo Melhor, C. Valadares	10.00–04.30
7)	2390	125.5	0.5	R. Cultura de Monte Alto, Jaboticabal	10.00–24.00
8)	2400	125.0	0.1	R. Tapuyo, Mossoró	09.00–20.00 22.00–03.00
9)	2400	125.0	0.5	R. Dif. de Amparo	08.30–15.00 19.00–24.00
10)	2410	124.1	1	R. Sirena, Leopoldina	11.00–14.00 21.00–01.00
11) ZYW32	2420	124.0	0.5	R. Carajá, Anápolis	09.00–16.00 19.00–03.00
12)	2420	124.0	0.5	R. São Carlos	09.00–04.00
13)	2420	124.0	0.25	R. Dif. Maranhão, Carolina	
14)	2430	123.5	0.25	Dif. Rio Bonito	09.00–02.00
15) ZYR231	2450	133.5	0.5	R.Cultura de Araçatuba	08.00–04.00
16) ZYR99	2460	122.0	0.5	R. Cacique de Sorocaba	09.30–03.00
17)	2480	121.0	1	R.Braganca, Braganca Paulista	
18) ZYN62	3255	92.17	0.5	R. Cl. de Marilia	10.00–02.30
19) ZYR92	3265	91.87	4	R. Ribeirão Preto	08.30–02.30
20) ZYK21	*3265	91.87	1	R. Tamandaré, Recife	
21) ZYR31	3275	91.60	1	R. Cl. Bauru	09.00–01.30
22) ZYR89	3285	91.32	1	R. Aparecida	10.00–24.00
23)	3285	91.32	1	Emis. da Educacão Rural, Natal	08.45–02.00
24) ZYH31	3305	90.77	1	R. Educadora do Cariri, Crato	11.00–15.00, 21.00–24.00
25) ZYV63	3315	90.50	0.5	R. Itatiaia, Belo Horizonte	11.00–02.00
26) ZYR220	3325	90.23	1	R. Dif. Guarulhos	09.00–01.00
27) ZYJ21	3325	90.23	0.5	R. Borborema, Campina Grande	08.15–03.00
28) ZYV30	3355	89.92	0.5	R. Dif. Brasileira, Uberlandia	09.30–03.00
29) ZYR59	3335	89.95	0.5	Vóz do Sertão, Pres. Prudente	12.00–17.00
30) ZYE	3335	89.95	1	R. Marajoára, Belem	11.00–01.00
31) ZYS45	3365	89.15	0.5	Dif. do Paraná, Londrina	09.00–01.00
32) ZYK28	3375	88.88	1	R. Olinda Pernambuco, Olinda	09.00–04.00
33)	3385	88.63	0.5	R. Cl. Teresina	11.00–02.00
34) ZYA41	3385	88.63	1	R. Eldorado, Rio	10.00–02.00
35)	3395	88.37	1	R. Tapuyo de Mossoró	09.55–03.00
36) ZYF23	4750	63.16	2	R. Dif. do Maranhão, São Luiz	09.00–01.00
37) ZYY3	4755	63.09	1/0.5	R. Brasil, Campinas	09.00–02.00
38) ZYN37	4765	62.96	1	R. Feira de Santana	09.00–03.00
39) ZYH29	4775	62.84	5	R. Dragão do Mar, Fortaleza	10.00–03.00
40) ZYR81	4775	62.84	5	R. Progresso de São Paulo	09.00–01.00
41) ZYY20	4785	62.70	1	R. Dif. Guaporé, Porto Velho	12.00–02.00
42) ZYM8	4785	62.70	0.5	R. Ribamar, São Luiz	11.00–02.00
43) ZYU25	*4795	62.57	1	R. Cultura de Cambuquira	
44) PRI4	4795	62.57	2	R. Tabajara, João Pessoa	09.30–02.00
45) ZYS8	4805	62.43	5	R. Dif. de Amazonas, Manaus	09.00–02.00
46) ZYP33	4815	62.31	1	R. Dif. Petropolis	10.00–04.00
47) ZYI127	4815	62.31	1	R.Iracema de Fortaleza	09.00–03.00
48) ZYE7	4825	62.18	0.5	R. Educadora da Parnaiba	10.00–02.00
49) ZYV56	4825	62.18	0.5	R. Cl. de Varginha	10.00–02.00
50) ZYV37	4835	62.05	0.5	R. Soc. Triangúlo Mineiro, Uberaba	09.30–02.30
51) ZYA	4835	62.05	1	R. Dif. Roraima, Boa Vista	11.00–16.00, 22.00–03.00
52) ZYU8	4845	61.92	0.5	R. Dif. Teresina	12.00–02.00
53) ZYR61	4855	61.79	1	R. Dif. Taubaté	08.00–05.00
54) PRC5	4865	61.66	2.5	R. Cl. do Pará, Belem	09.00–04.00
55) ZYZ30	4875	61.54	5	R. Jornal do Brasil, Rio de Janeiro	08.00–05.00
56) ZYG26	4885	61.41		R. Pioneira de Teresina	
57) ZYC	4885	61.41	1	R.Acreana, Rio Branco	12.00–02.00
58) ZYV50	4885	61.45	5	R. Cultura de Poços de Caldas	10.00–01.00
59) PRF6	4895	61.29	2.5	R. Baré, Manaus	10.00–03.00
60) ZYN22	4895	61.28	1	R. Cultura da Bahia, Salvador	09.00–02.00
61) ZYZ20	4905	61.16	5	R. Relogio Federal, Rio de Janeiro	00.00–24.00
62) ZYR60	4915	61.04	1	R. Cultura de Araraquara	09.00–03.00
63) ZYE2	4915	61.04	2	R.Dif. Macapá, Amapá	12.00–01.00
64) ZYL20	4915	61.04	1	Emis. Rio São Francisco, Penedo	08.30–02.00
65) ZYV32	4925	60.90	1	R. Industrial de Juiz de Fóra	
66) ZYA6	4925	60.90	1	R. Iracema, Sobral	09.00–02.00
67)	*4935	60.80	0.5	Lins R. Clube, Lins	
68) ZYI21	4935	60.80	1	R. Poti, Natal	10.00–02.00
69) ZYO25	4945	60.67	1	R. Capixaba, Victoria	10.30–02.00
70) ZYF22	4945	60.67	0.25	R. Caxias do Sul	11.00–01.00
71) ZYE23	4945	60.67	1	R. Educadora de Bragança	09.00–13.00, 15.00–01.00
72) PRF7	4955	60.54	2	R. Cultura de Campos	08.30–02.30
73) ZYV9	4975	60.30	5/2.5	R. Timbira, São Luiz	12.00–03.00
74) ZYP27	4975	60.30	1	R. Copacabana, São Conçalo	09.00–03.00

Brazil

Call	kc	m	kW	Name	h of tr.
75) ZYZ5	4985	60.18	1.5	R. A Voz do Oeste, Guiaba	10.00–02.00
76) ZYY2	4995	60.06	5	R. Brasil Central, Goiania	09.00–05.00
77) PRC8	5015	59.80	1	R. Guanabara, Rio de Janeiro	00.00–24.00
78) ZYX24	5025	59.70	1	R. Dif. Aquidauana	12.00–02.00
79)	5025	59.70	1	R. Dif. A Voz da Amazonia	
81) PRI4	5035	59.58	0.5	R. Espírito Santo, Vitoria	12.00–01.00
82)	5045	59.46		R. Mundial, Rio de Janeiro	
83) ZYP23	5045	59.46	1	R. Quitandinha, Petropolis	11.00–01.00
84) ZYO21	*5055	59.35	2	R. Cultura de Cuiabá	
85) ZYO23	5055	59.35	2	R. Vitória	11.30–03.00
86) ZYR226	5955	50.38	7.5	R. Gazeta de São Paulo	10.00–04.30
87) ZYU60	5965	50.28	7.5	R. Guaiba, Porto Alegre	09.30–21.30
88) ZYT44	5975	50.21	10	R. Guarujá, Florianopolis	11.00–04.00
89) PRL5	5990	50.04	7.5	R. Ministerio da Educação, Rio de Janeiro	08.30–05.00
90) PRK5	6000	50.00	5	R. Inconfidencia, Belo Horizonte	11.00–04.00
91) PRA8	6015	49.88	25	R.Cl. de Pernambuco, Recife	11.00–02.00
92) ZYR63	6025	49.79	10	Emis. Piratininga, São Paulo	11.00–04.00
93) ZYZ26	6035	49.71	10	R.Globo, Rio de Janeiro	08.00–04.00
94) ZYS33	6045	49.63	7.5	R.Cl. Paranaense, Curitiba	09.00–03.00
95) PRB21	6055	49.55	10	R. Panamericana, São Paulo	12.00–01.00
96) ZYZ31	6065	49.46	7.5	R. Rural Brasileira, Rio de Janeiro	08.00–12.00, 20.00–23.00
97) PRL8	6065	49.46	10	R. Nacional, Brasilia	08.00–03.00
98) ZYK2	6085	49.30	15	R. Jornal do Comércio, Recife	09.00–03.00
99) ZYB7	6095	49.22	25	R. Dif. São Paulo	09.00–03.00
100) ZYN6	6105	49.14	5	R.Cl. Ceará, Fortaleza	11.00–03.00
101) ZYC7	6115	49.06	50	R. Tupi, Rio de Janeiro	08.00–04.00
102) PRG9	6125	48.98	7.5	R.Nacional, São Paulo	09.00–03.00
103) PRC21	6135	48.90	7.5	R.Gaucha, Porto Alegre	10.00–02.00
104) PRL9	6145	48.82	50	R. Nacional	08.00–05.00
99) ZYR58	6165	48.66	7.5	R. Difusão São Paulo	09.00–03.00
106)	6175	48.58	10	R. Guarani, Belo Horizonte	10.00–03.00
107) ZYR77	6185	49.58	10	R. Bandeirantes, São Paulo	09.00–03.00
108) PRD21	6195	48.43	10	Emis. Continental	07.30–04.30
97) PSL	7935	37.81	20	Agencia Nacional	22.30–23.30
109) PRN9	9295	32.28	2.5	R. Dif. Departamento Segurança	
95) PRB22	9505	31.56	7.5/50	R. Record, São Paulo	09.00–03.30
110) PRD5	9515	31.53	1	R. Roquete Pinto	09.00–03.00
111) ZYS43	9545	31.43	7.5	R. Emis. Paranaense, Curitiba	10.00–03.00
98) ZYK3	9565	31.37	15	R. Jornal do Comercio, Recife	09.00–04.00
112) ZYZ27	9575	31.33	10	R. Mayrink Veiga, Rio de Janeiro	00.00–24.00
102) ZYR56	9585	31.30	50	R.Excelsior, São Paulo	10.00–04.00
60) ZYN29	9595	31.27	10	R. Cultura da Bahia	11.00–02.00
101) ZYC8	9610	31.22	10	R. Tupi. Rio de Janeiro	08.00–04.00
113) ZYR96	9620	31.19	10	R. 9 de Julho, São Paulo	08.00–03.00
22) ZYR83	9635	31.14	7.5	R. Aparecida	12.00–01.00
92) ZYR64	9635	31.14	10	R. Piratininga, São Paulo	11.00–04.00
58) ZYV40	9645	31.10	7.5	R. Cultura de Poços de Caldas	12.00–24.00
114)	9665	31.04		R. Rio, Rio de Janeiro	
97) PRL8	9665	31.04	10	R. Nacional, Brasilia	10.00–04.00
115) ZYT29	9675	31.01	10	R. Diario da Manhã, Florianopolis	12.00–01.00
86) ZYR227	9685	30.98	7.5	R. Gazeta	10.00–04.30
116) ZYB22	9695	30.94	7.5	R. Rio Mar, Manaus	09.00–20.00
117) ZYZ24	9705	30.91	10	R. Mauá, Rio de Janeiro	07.00–05.00
101) PRL7	9720	30.86	50	R. Nacional, Rio	08.00–04.00
118) ZYU59	9730	30.83	7.5	R. Soc. Farroupilha, Porto Alegre	12.00–01.00
105) ZYR57	9745	30.79	7.5	R.Cultura, São Paulo	09.00–03.00
76) ZYW23	9755	30.70	7.5	R. Brasil Central Goia nia	09.00–05.00
89) PRL4	9770	30.71	1	R. Ministerio da Educação, Rio	08.30–05.00
76) ZYW23	9775	30.69	7.5	R. Brasil Central	12.00–01.00
97) PSH	10220	29.35	20	Agencia Nacional, Rio de Janeiro	22.30–23.30
97) PRL8	11720	25.60	10	R. Nacional Brasilia,	08.00–03.00
119) ZYW28	11735	25.56	7.5	R. Clube de Goiania	11.00–02.00
92) ZYR65	11745	25.54	10	R. Emis. Piratininga, São Paulo	11.00–04.00
105) ZYB8	11765	25.50	25	R. Tupi, São Paulo	09.30–03.30
112) ZYZ28	11775	25.48	10	R. Mayrink Veiga, Rio de Janeiro	00.00–24.00
87) ZYU61	11785	25.46	7.5	R. Guaiba	21.30–04.30
104)	11795	25.43	10	R. Nacional, Rio	08.00–04.00
93) ZYZ36	11805	25.41	10	R. Globo	09.00–04.00
76) ZYW24	11815	25.39	7.5	R. Brasil Central, Goiania	09.00–05.00
98) ZYK32	11825	25.37	15	R. Jornal do Comercio, Recife	09.00–03.00
120)	11855	25.31	10	Rede Paranaense de Emissoras, Curitiba	
91) PRA8	11865	25.28	7.5	R.Cl. Pernambuco	09.00–03.00
121) ZYN32	11875	25.26	10	R. Soc. da Bahia, Salvador	10.00–02.00
117) ZYZ25	11885	25.22	10	R. Mauá	07.00–05.00
103) PRC20	11915	25.18	7.5	R. Soc. Gaucha	10.30–01.30
107) ZYR78	11925	25.16	10	R. Bandeirantes	09.00–03.00
94) ZYS35	11935	25.14	7.5	R.Cl. Paranaense	10.30–02.00
89) PRL3	11950	25.10	7.5	R. Ministerio da Educação, Rio	08.30–05.00
95) PRB24	11965	25.07	50	R.Record, São Paulo	09.00–03.30
97) PUB25	12058	24.88	2	Agencia Nacional, São Paulo	
97) PSF	14690	20.45	20	Agencia Nacional	22.30–23.30
96) ZYZ32	15105	19.86	7.5	R. Rural Brasileira	11.30–03.00
122)	15115	19.85	7.5	R. Soc. Guairacá, Curitiba	11.30–03.00
121) ZYN31	15125	19.83	10	R. Soc. da Bahia, Salvador	08.00–04.00
95) PRB23	15135	19.82	10	R. Panamericana	09.00–03.30
98) ZYK33	15145	19.81	15	R. Jornal do Comercio, Recife	09.00–04.00
99) ZYB9	15155	19.80	25	R. Difusora de São Paulo	09.00–03.00
100) ZYN7	15165	19.78	5	R.Cl. do Ceará	10.00–03.00
123)	15175	19.76	7.5	Emiss. Riograndense, Pelotas	11.00–15.00, 20.00–03.00
90) PRK9	15190	19.75	5	R. Inconfidencia, Belo Horizonte	09.00–04.00
97)	15205	19.74	10	Agencia Nacional	22.30–23.30
73) ZYY9	15215	19.71	2.5	R. Timbira, São Luiz	12.00–01.00
60) ZYN30	15225	19.70	10	R. Cultura da Bahia, Salvador	10.00–02.00
30) ZYE21	15245	19.68	10	R. Marajoara, Belem	11.00–01.00
102) PRG9	15265	19.66	50	R.Excelsior, São Paulo	09.00–04.00
104) PRL8	15295	19.62	10	R. Nacional	08.00–04.00
86) ZYR228	15325	19.58	1	R. Gazeta de São Paulo	10.00–04.30
118) ZYU60	15335	19.56	7.5	R. Farroupilha, Porto Alegre	10.00–02.00
101) ZYC9	15370	19.52	10	R. Tupi, Rio de Janeiro	08.00–04.00
124) ZYR206	15415	19.46	1	R.Cl. Ribeirão Preto	12.00–01.00
97)	15445	19.43	10	R. Nacional de Brasilia	08.00–03.00
114)	15445	19.43	50	R. Rio, Rio de Janeiro	
113) ZYR97	17705	16.94	10	R. Novo de Julho	10.00–03.00
125) ZYR232	17725	16.93	1	R. Universitaria Santos Dumont, São Jose dos Campos	23.00–02.00
97)	17775	16.90	10	Agencia Nacional, Brasilia	
97)	17775	16.90	10	Agencia Nacional, Rio de Janeiro	
45)	17795	16.86	5	R.Dif. do Amazonas	10.00–01.00
99)	17815	16.82	10	R. Difusao São Paulo	09.00–03.00
104) PRL9	17850	16.81	10	R. Nacional	08.00–04.00
89) PRL2	17875	16.79	7.5	R. Ministerio da Educação, Rio	08.30–05.00
97)	21490	14.50	10	Agencia Nacional, Brasilia	
97)	21500	13.96	10	Agencia Nacional, Brasilia	
97)	21580	13.90	10	Agencia Nacional, Brasilia	

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128)		580	10
129)	PRG5	580	1/0.5
130)	ZYM3	580	1/0.5
131)	ZYM25	580	1/0.5
132)	ZYD4	580	1/0.5
61)	ZYZ22	°590	0.25
118)	PRH2	°600	50
133)		620	10
95)	PRH7	°620	5/10
134)	ZYX25	630	10
135)	ZYV44	630	1
136)	ZYA3	630	1
137)	PRJ6	630	1
25)	ZYV29	°630	5
138)	ZYU37	630	1
139)	PRF9	640	2.5
140)	ZYM22	670	10/5
102)	ZYR56	°670	10
141)	ZYK26	680	1
142)	ZYS65	680	1
74)	ZYP20	°680	5
103)	PRC2	°680	10/5
39)	ZYH29	°690	10
143)	PRC7	690	25/10
31)	ZYS44	°690	0.25
144)	ZYW3	690	1
34)	ZYR213	°700	50
53)	ZYA8	°720	1
91)	PRA8	°720	0.25
87)	ZYU58	°720	50
145)		720	1/0.25
146)	ZYW53	730	1
147)		730	1
148)	ZYO9	730	1/0.25
149)	ZYR80	730	2.5
150)	ZYH8	730	1/0.25
85)	ZYO21	°730	1
121)	PRA4	°740	50
109)	PRN9	°760	2
98)	PRL6	°780	20/10
19)	ZYR79	°780	0.25
1)	ZYV38	°780	0.25
89)	PRA2	°800	25
151)	ZYT94	820	1
152)	ZYA4	820	1/0.25
153)	—	820	1
29)	PRI5	°820	0.25
107)	PRH9	°840	25
154)	ZYD8	840	10/5
155)	ZYT33	840	1/0.25
156)	PRA3	860	50
90)	PRI3	°880	50
157)	ZYU33	880	10
86)	PRA6	°890	10/5
20)	ZYK20	°890	20
158)	ZYI23	900	10
101)	PRB7	°900	10/5
159)	ZYR242	900	1/0.5
160)	PRJ3	930	5
161)	ZYM20	930	5
162)	ZYH3	930	1
163)	ZYS25	930	1
164)	ZYU102	930	1/0.25
55)	PRF4	°940	50
95)	PRF5	°960	10/5
165)	ZYO4	960	10
166)	ZYF5	960	1/0.25
38)	ZYR3	°970	1
167)	ZYH32	970	1
168)	ZYI26	970	1
169)	ZYI2	970	5
170)	ZYH21	970	1
67)	ZYB3	°970	0.25
104)	PRE8	°980	50
95)	PRB9	°1000	50
171)	PRB3	1010	2/0.5
115)	ZYT26	°1010	10
60)	ZYN23	°1010	10/5
172)	ZYO3	1010	1/0.5
173)		1020	30/20
174)	PRB8	1030	1/0.25
32)	ZYK27	°1030	10
108)	PRD8	°1030	7.5
105)	PRG2	°1040	50
175)	PRD2	1060	10
176)	PRD7	1080	1
177)	ZYN24	1080	1
178)	ZYB4	1080	1/0.5
179)	ZYX7	1080	1/0.25
180)	ZYE4	1080	1/0.5
181)	ZYU67	1080	2/0.5
182)	ZYV47	1080	1/0.25
43)	ZYV52	°1080	0.25
183)	ZYK22	1080	1/0.25
184)	ZYR64	1080	1/0.25
18)	PRI2	°1090	1
65)	ZYT9	°1090	1
185)	ZYT38	1090	1/0.25
186)	ZYN25	1090	1
23)	ZYI25	°1090	1
89)	—	1090	1
188)	ZYU50	1100	1
102)	PRG9	°1100	50
44)	PRI4	°1110	10
189)	ZYT25	1110	1/0.25
190)	ZYS67	1110	1/0.25
72)	PRF7	°1110	5
191)	ZYV66	1110	1
60)	ZYN20	°1120	10
30)	ZYE20	°1130	25
117)	PRH8	°1130	25
35)	ZYI24	°1130	1
193)	ZYU77	1130	1/0.25
194)	ZYT34	1130	1/0.25
195)		*1140	10
196)	ZYH7	1160	1/0.5
197)	ZYS73	1160	1
81)	PRI9	°1160	10
75)	PRH3	°1160	1
198)	PRF5	1160	1
199)	ZYA5	1160	1
200)	ZYI20	1170	1
201)	PRC9	1170	5
202)	ZYU72	1170	1/0.25
203)	ZYU38	1170	1/0.25
204)		1170	1/0.25
93)	PRE3	°1180	50
92)	PRB6	°1200	10
100)	PRE9	°1200	10
206)	ZYU91	1200	1/0.25
97)	PRL8	°1210	10/5
21)	PRG8	°1210	1/0.5
207)	ZYL9	1210	1/0.5
49)	ZYB2	°1210	1
111)	ZYZ9	°1210	1
208)	ZYX	1210	1
209)	ZYK23	1210	1/0.5
210)		1210	1/0.25
112)	PRA9	°1220	50
211)	ZYB21	1240	5
2)	ZYB21	°1240	5
212)	ZYC4	1240	1/0.5
213)	ZYP4	1240	1/0.5
214)	PRB5	1240	1
215)	ZYU76	1240	1/0.25
216)	ZYR84	1240	1/0.25
217)		1240	1/0.5
218)	PRJ2	1250	1/0.5
219)	PRA5	1260	10/5
220)		1260	1/0.25
221)	ZYG	1260	10
222)	ZYL21	1260	5
223)	ZYV65	1260	1/0.25
76)	ZYX9	°1270	10
224)	ZYS23	1270	1/0.25
225)	ZYV62	1270	1
226)	ZYU44	1270	1
68)	ZYB5	°1270	1
101)	PRG3	°1280	50
105)	PRE4	°1300	10/5
47)	ZYR7	°1300	10
227)	ZYX22	1300	1
228)	ZYR201	1320	1
119)	ZYG3	°1320	10
229)	PRH4	1320	1/0.5
230)	ZYT31	1320	1/0.25
74)	ZYZ24	1320	10/5
231)		1320	1
232)		1320	10
15)	PRI8	°1330	1
233)	ZYV59	1330	1/0.35
234)	ZYV33	1330	1/0.5
235)	ZYI5	1330	1/0.5
236)	PRC4	1330	1/0.5
237)		1330	1/0.5
238)	ZYE25	1330	10
106)	PRH6	°1340	1/0.25
239)	ZYX2	1340	1/0.25
240)		1340	10
100)		°1340	1
241)	ZYX5	1340	1/0.25
58)	PRH5	°1350	5
242)	ZYU85	1350	1
243)	ZYN35	1350	5
21)	ZYO7	°1350	1
245)		1350	1/0.25
77)	PRC8	°1360	10
246)	ZYH25	1360	10
247)	ZYU82	1360	1
62)	PRD4	°1370	1
69)	ZYO22	°1370	1
248)	ZYK31	1370	5
80)	ZYW21	°1370	1
33)	ZYQ3	°1370	1
70)	ZYF3	°1370	5
249)	ZYR212	1370	1
250)	ZYS46	1390	1
251)	ZYJ2	1390	1/0.5
252)	ZYK25	1390	1
253)	ZYV49	1390	2
24)	ZYH30	°1400	5
254)		1400	5
110)	PRD5	°1400	10/5
255)	ZYR224	1400	1/0.25
42)	ZYF21	°1410	1
256)	PRE7	1410	25/10
257)	ZYH26	1410	10
258)	ZYI4	1420	1/0.25
259)	ZYU94	1420	1
88)	ZYJ7	°1420	5/2.5
260)	PRE2	1430	10
261)		1430	1
262)	ZYH5	1430	1/0.25
94)	PRB2	°1440	20/10
263)		1440	10
54)	PRC5	°1450	10
264)	PRB4	1450	5/2
265)	ZYJ20	1450	1
266)	ZYP36	1450	5/2.5
267)	ZYT21	1450	1/0.25
57)	ZYD9	°1460	0.25
268)	ZYH22	1460	1
63)	ZYE2	°1460	0.25
269)	PRH2	1460	20
270)	ZYE3	1470	1/0.5
271)	ZYD2	1470	1/0.5
28)	PRC6	°1470	1/0.5
272)	ZYZ6	1470	1
273)		1470	1
48)	PRJ4	°1470	0.5
274)	ZYN3	1470	1/0.5
11)	ZYJ3	°1480	0.5
116)	ZYR20	°1480	1
275)	ZYH20	1480	1
46)	PRD3	°1480	5
71)	ZYE22	°1480	0.25
73)	PRJ9	°1490	1
276)	ZYP29	1490	1/0.5
277)	ZYU46	1510	1/0.25
278)	ZYS9	1540	2.5
279)	ZYI	1540	2.5
6)	ZYV64	°1550	0.25
4)	ZYP39	°1550	0.25
5)	PRJ5	°1550	0.25
280)	ZYK30	1560	1
281)	ZYN33	1560	1
282)	ZYS56	1570	10
3)		°1570	0.25
22)	ZYR44	°1600	0.25

States Abbreviations: AC=Acre, AL=Alagoas, AM=Amazonas, AP=Amapá, BA=Bahia, CE=Ceará, DF=Brasilia, ES=Espirito Santo, GB=Guanabara, GO=Goiás, MA=Maranhão, MG=Minas Gerais, MT=Mato Grosso, PA=Pará, PB=Paraiba, PE=Pernambuco, PI=Piaui, PR=Paraná, RJ=Rio de Janeiro, RD=Rondonia, RN=Rio Grande do Norte, RS=Rio Grande do Sul, SC=Santa Catarina, SE=Sergipe, SP=São Paulo.

Short Waves:

1) C.P. 401, Uberlandia, MG – 2) Itacoatiara, AM – 3) Parintins, AM – 4) Rua M. Francisco da Rosa 84, São João de Miriti, RJ – 5) C.P. 105, Limeira, SP.

6) Av. Brasil 2770, Governador Valadares, MG – **D.Prgr:** mw: 10.00–14.30, 18.00–02.00. N: 11.00, 15.55, 22.00, 23.25, 01.05 – **Ann:** "R. Por Um Mundo Melhor" – V. by letter. Re. in P, F, E, G, D, Sp, I.

7) Jabotical, SP – 8) Mossoró, RN – 9) C.P. 77, Amparo SP.

10) C.P. 6, Leopoldina, MG. **Cable:** Sirena – **L.P:** Dir. Gen: G. M. Monteiro – **D.Prgr:** 11.00, 14.00, 21.00, 01.00 – **Ann:** "R. Sirena, do Sistema Radioeducativo Nacional, do Ministerio da Educação e Cultura" – V. by letter. Re. in P, E or Sp – **Pub:** Prgr. schedule free.

11) Praça Bom Jesus 67, Anápolis, GO. **Te:** 2263. **Cable:** "Caraja" – **L.P:** Pres: Dep. P. A. Gonzaga Jaime. Dir. Tec: J. S. Vilarinho – **D.Prgr: N:** W 11.25, 13.25, 14.05, 14.45, 16.25, 21.30, 01.25 Sun: 14.15 – **Ann:** "Sintonizan As Emissoras de Ondas Média e Curta da R. Caraja de Anapolis – Goias, a Voz do Coracao do Brasil Ouvem a R. Caraja de Anápolis, a mais antiga, a mais possante, a mais ouvida" – V. by letter. Rp.

12) C.P. 95, São Carlos, SP – **L.P:** Pres: G. Rossi – V. by letter.

13) Carolina, MA – 14) Rua Dr. E. Cordeiro 26, Rio Bonito, RJ.

15) C.P. 246, Araçatuba, SP. **Te:** 2270 – **L.P:** Gen. Mgr: J. B. Brussolo. Dir. Tec: F. C. Arroyo – **D.Prgr: N:** 15.15, 22.00 – **Ann:** "Emissora brasileiras da R. Cultura de Araçatuba PRI8, 1330kc, ondas médias e ZYR231, 2450kc ondas tropicais" – V. by letter. Records accepted.

16) Rua Miranda Azevedo 311, Sorocaba, SP – 17) Bragança Paulista, SP – 18) Rua Paes Leme 20, Marilia, SP – **L.P:** Dir. Gen: O. Lignelli.

19) C.P. 814, Ribeirão Preto, SP – 20) Av. Cruz Cabuga 394, Recife.

21) Rua Padre Anchieta 741, Bauru – **L.P:** Pres: M. Leuzzi Jr – V. by QSL-card. Re. in P, Sp, E, F.

22) Praça NS Aparecida 315, Aparecida. **Te:** 2197 – **L.P:** Dir. Gen: J. A. Ferreira de Macedo – **Ann:** "R. Aparecida, capital espiritual do pais" – **V.** by letter. Rp – **Pub:** Prgr. schedule free – 23) Praça Pio X, 2° andar, Natal, RN – **L.P:** Dir. Gen: E. de Araujo Sales. Dir. Tec: F. de Souza Segundo – **V.** by letter. Re. in Sp, P – 24) C.P. 57, Crato, CE – **L.P:** Pres: V. de Araujo Mattos.

25) Rua Coromandel 117, Belo Horizonte, MG. **Te:** 48595 – **L.P:** Dir. Gen: J. Carneiro. Dir. Tec: W. Salvador – **Ann:** "R. Itatiai, a emissora Brasileira que mais cresce" – **V.** by letter. Rp.

26) Rua Pedro II, 148, Guarulhos.

27) C.P. 160, Campina Grande, PB. **Te:** 1960 – **L.P:** Dir. Gen: G. de Sousa. Mgr: J. B. de Lima. Dir. Tec: J. Cavalcanti de Albuquerque – **D.Prgr: N:** 10,00, 15.30, 20.05, 01.00, "A Voz do Brasil": 22.00 – **Ann:** "R. Borborema, Emissoras Associadas de Campina Grande" – **V.** by letter. Records accepted – **F.Pl:** 5kW on mw, TV st.

28) C.P. 173, Uberlandia, MG. **Te:** 4466. **Cable:** "Radico" – **L.P:** Dir. Gen: G. Motta Baptista. Dir. Tec: V. P. Dossena – **D.Prgr: N:** 13.30, 20.00 – **Ann:** "R. Difusora Brasileira, PRC6 e ZYV30, Uberlandia, MG" – **V.** by letter, Re. in P, Sp, Prgr. schedule free.

29) C.P. 5, Pres. Prudente, SP – **L.P:** Dir. Gen: A. Campos – **Ann:** "R. Presidente Prudente, uma das Emissoras Coligadas, falando para todo o Brasil" or "PRI5 e ZYR59, R. Difusora de Presidente Prudente, uma das Emissoras Coligadas, transmitindo simultâneamente em ondas médias e curtas 1240kc, 3335kc".

30) C.P. 491, Belém, Pará PA.

31) C.P. 1870, Londrina, PR – **L.P:** Dir. Gen: Dr. R. Zanoni.

32) C.P. 1313, Olinda, PE. **Te:** 45353. **Cable:** "Radiolinda" – **L.P:** Dir. Gen: L. de Oliveira. Dir. Tec: J. Carlos Cavalcante de Saboia Jr – **Ann:** "ZYK27, ZYK28 ondas media e curta, R. Olinda, Pernambuco, Brasil". **V.** by letter. Rp.

33) C.P. 125, Teresina PI – **L.P:** Dir. Gen. W. S. Guimaraes,

34) Av. Pres Vargas 417, Rio de Janeiro, GB.

35) Praça Rafael Fernandes 8, Mossoró – **L.P:** Dir. G: J. N. da Escossia. Mgr: J. M. de Souza Luz. Dir. Tec: C. Alberto – **Ann:** "R. Tapuyo de Mossoró, ondas médias e curtas, falando para todo o Brasil. A mais popular emissôra mossoroense" – **V.** by letter. Records accepted.

36) C.P. 152, São Luiz, MA – **V.** by letter.

37) C.P. 625, Campinas, SP – **L.P:** Dir. Gen: S. Pedroso – **Ann:** "ZYV3, R. Brasil de Campinas ZYR39, R. de Valinhos emissoras brasileiras da Organização Irmaos Pedroso" – **V.** by letter.

38) Praça da Bandeira 59, Feira de Santana. **Te:** 168 – **L.P:** Dir. Gen: F. A. de Grottamara. Dir. Tec: D. Nogueira – **Ann:** "Em seus receptores a R. Sociedade de Feira de Santana em ondas media, curta e FM, ZYR3 e ZYN37" – **Int-Sig:** Vibraphone – **V.** by letter. Records accepted. Rp.

39) Rua P. Pereira 383, Fortaleza, CE – **L.P:** Dir. Gen: M. S. Pimentel – **D.Prgr:** "Jornal das Tres Americas" (News in Sp, E, P): 02.23–02.36 – **N.** in Portuguese: W 1450, D 01.35 – **Ann:** "R. Dragão do Mar, a emissora do Ceará que o mundo escuta" – **V.** by letter.

40) Av. Liberdade 1034, São Paulo. **Te:** 32-8708 –

41) Guaporé, Porto Velho, RD – **V.** by letter or QSL-card.

42) Rua do Apium 118–130, São Luiz, MA.

43) Av. Vergilio Franco 375, Cambuquira, MG.

44) Palacio do Governo, Joao Pessoa, PB – **D.Prgr: N:** 21.45, 24.00, 01.35 – **Ann:** "PRI4, R. Tabajara da Paraiba transmitindo em ondas curtas e medias" – **V.** by letter, Re. in E, Sp, F.

45) Eduardo Ribeiro 566, Manaus, AM.

46) Praça D. Pedro II°, 17, Petropolis, RJ. **Cable:** Difusora – **L.P:** Dir. Gen: W. Carneiro Malta – **D.Prgr: N:** 16.00, 23.25, 01.05, 02.45 – **Ann:** "Emissoras de ondas médias e curtas da Petropolis R. Difusora, o microfone lider do Estado do Rio" – **V.** by letter.

47) C.P. 578, Fortaleza, CE – **L.P:** Dir. Gen: F. B. Barreto.

48) C.P. 31, Parnaiba, PI – **V.** by letter.

49) C.P. 102, Varginha, MG – **L.P:** Dir. Gen: A. L. Bittencourt – **D.Prgr: N:** 14.15, 21.15 – **Ann:** "Emissoras de Varginha, ZYB2 e ZYV56, em ondas curtas e médias" – **V.** by letter. Re. in P, Sp, E.

50) C.P. 38, Uberaba, MG.

51) Boa Vista, RS – 52) C.P. 125, Teresina, PI.

53) Rua V. do Rio Branco 247, Taubaté, SP. **Te:** 302 – **L.P:** Dir. Gen: E. A. Beringhs. Dir. Tec: A. R. Gonçalves – **Ann:** "ZYA8 e ZYR61 ondas medias e curtas, da R. Difusora Taubaté, S. Paulo, Brasil" – **V.** by QSL-card. Records accepted.

54) Av. Pres. Vargas 145, Belém. PA. **Te:** 3263 – **L.P:** Dir. Gen: E. Proença. Dir. Tec: M. Franco – **D.Prgr: N:** 10.00, 11.30, 15.25, 20.55, 22.00, 23.30, 02.55 – **Ann:** "PRC5 R. Clube do Pará, Belém, Brasil" – **V.** by letter.

55) Av. Rio Branco 110, Rio de Janeiro. **Te:** 22-1818 – **D.Prgr: N:** 10.55, 15.30, 22.00, 01.55 – **V.** by letter – 56) Teresina, PI.

57) Departamento do Imprensa e Radiodifusão do Acre, Rio Branco.

58) C.P. 143, Poços de Caldas, MG – **V.** by letter or QSL-card.

59) Av. Eduardo Ribeiro 566, Manaus, AM.

60) Av. 7 de Setembro 311, Salvador, BA. **Cable:** "Radicultura".

61) Av. Pres. Vargas 417A, Rio de Janeiro, GB – **L.P:** Pres: J. J. de Carvalho – **V.** by letter or QSL-card.

62) C.P. 22, Araraquara, SP. **Te:** 2828 – **L.P:** Dir. Gen: R. Lupo. Dir. Tec: J. A. Quirino dos Santos – **D.Prgr: N:** 14.30, 15.30, 23.00 – **Ann:** "Emissoras da R. Cultura Araraquara PRD4, ZYR60, PRD4-FM" – **V.** by letter. Records accepted.

63) Av. Candido Mendes, Macapa, AP – **D.Prgr: N:** every h on the h and W 21.30 – **V.** by letter – **F.Pl:** 10kW sw-tr.

64) Praça J. Calheiros 8, Penedo, AL – **L.P:** Dir: C. H. V. Guimaraes – **V.** by letter. Re. in E, P.

65) Praça J. Pessoa 9, Juiz de Fora, MG – **L.P:** Dir. Gen: Dr. S. V. Mendes – **D.Prgr: N:** 12.00, 15.10, 20.00, 22.30, 00.30 – **Ann:** "Emissoras Brasileiras de ondas curtas e médias da R. Industrial de Juiz de Fora, Estado de Minas Gerais, uma das Componentes do Organização Sergio Mendes, a serviço do Brasil" – **V.** by letter.

66) Sobral, CE – 67) Rua Luiz Gama 492, Lins, SP.

68) C.P. 145, Natal, RN. **Te:** 1205 – **L.P:** Dir. Gen: L. M. Alves – **D.Prgr:** mw: 08.00–03.00. "A Voz de Natal" (typical Brazilian music) D 02.30–03.00 (Ann. in P, E, F) – **V.** by letter. Re. in E, F or Sp.

69) Esc. Estiva 4° and, Vitória, ES – **Ann:** "Estaçoes de ondas médias e curtas R. Capixaba, Vitória, Brasil" – 70) Caxias, MA.

71) Rua Dr. Candido Rodrigues 87, Bragança, PA. **Te:** 112 – **D.Prgr: N:** 09.55, 10.55, 11.55, 19.55, 24.00 – **Ann:** "R. Educadora de Bragança ZYE22, ZYE23 ondas médias e tropical..., a Emissora Católica da familia brasileira" – **V.** by letter. Re. in P.

72) C.P. 79, Campos, RJ. **Te:** 1582 – **L.P:** Dir. Gen: M. F. Sampaio. Dir. Tec: N. Silva – **D.Prgr: N:** 09.45, 10.30, 13.00, 16.00, 18.00, 22.55, 01.30. **Ann:** "PRF7, R. Cultura de Campos pioneira e lider do estado do Rio" – **V.** by letter. Records accepted.

73) Edif. Matos Carvalho 3° andar, São Luis, MA. **Te:** 1160 – **L.P:** Dir: J. Ferreira – **D.Prgr:** Sun 23.30–24.00 English; Mon 01.00 prgr. for foreign Listeners in E, P, Sp.

74) São Gançalo, R.J. – **L.P:** Dir. Gen: I. D. Mello, A. de Lima Santana – **Ann:** "R. Copacabana, a emissora do Otimismo".

75) C.P. 126, Cuiaba, MT – **L.P:** Dir: J. Oliveira.

76) C.P. 330, Goiania, Go. Te: 6-2555. **Cable:** "Errebece" – **L.P:** Dir. Gen: J. de Ribamar Leite. St. Mgr: S. O. Castro Filho, L. Rotoli. Dir. Tec: J. Fleury – **D.Prgr: N:** W 12.00, 15.00, 21.54, 23.24, 01.04, 03.00. Sun 11.25, 12.25, 13.25, 14.25, 15.54, 21.25, 22.25, 23.24 – **Ann:** "Sintonizam R. Brasil Central, Goiânia, ondas media, curta, tropical e frequencia modulada, operando em Goiânia, Capital do Estado de Goiás". **V.** by QSL-card. Records accepted.

77) Av. 13 de Maio 23, Rio de Janeiro, GB – **L.P:** Dir: E. Leite.

78) Aquidauna, MT – 79) Manaus, AM – 80) see 76.

81) C.P. 80, Vitória, ES – **L.P:** Dir. of Broadc. H: Blachman – 82) Rio de Janeiro, GB – 83) Petropolis, RJ – 84) Cuiába, MT.

85) C.P. 700, Vitória, ES – **L.P:** Dir: J. Cavalcanti. Dir. Tec: J. L. Rocha – **Ann:** "Ouvem a R. Vitória, da capital do Espirito Santo, Brasil" – **V.** by letter.

86) Av. Casper Libero 88.2° andar, São Paulo. **Te:** 355151. **Cable:** "Radigazeta" – **L.P:** Dir. Gen: J. F. Ferreira Jorge. Dir. of Broadc: H. Carvalho de Castro. Dir. Tec: A. Belardi – **D.Prgr: N:** 15.00, 19.00, 01.30, also every h on the h – **Ann:** "PRA6 R. Gazeta, São Paulo, a emissora da Elite, simultaneamente com ondas medias e curtas" – **Int-Sig:** First movement of "Concert in B" by Tjaikowsky – **V.** by QSL-card. Rp. Re. in P, E, F, Sp.

87) Rua Caldas Jr. 219, Porto Alegre, RGS – **L.P:** Dir. Gen: A. Pasqualini. Mgr: F. A. Gomes. Dir. Tec: B. F. Steiger – **Ann:** "Emissoras Brasileiras de ondas médias e curtas de R. Guaíbe de Pôrto Alegre, Rio Grande do Sul, Brasil" – **V.** by letter and QSL-card. Records accepted – 88) C.P. 45, Floranopolis, SC – **L.P:** Dir: C. Bonetti. **V.** by QSL-card.

89) Ministerio da Educação e Cultura, Praça da Republica 141-A, Rio de Janeiro, GB. (Owned & operated by The Federal Go, Ministry of Education) – **L.P:** Dir. Gen: Y. Linhare, Mgr: R. Reus. Dir. Tec: M. Casé – **D.Prgr: "Musica Brasileira"** Mon–Thurs 19.30–20.30 on 17875kc with ann. in German (Mon), English (Tues), French (Wed), Spanish (Thurs) – **N:** 12.00, 13.30, 16.45, 18.00, 21.25, 23.55, 02.00 – **Nat. Prgr:** Mon, Wed, Fri 23.30 – **Geography:** Tues, Thurs, Sat 22.30 – **Mathematics:** Tues, Thurs, Sat 23.00 – **History:** Tues, Thurs, Sat 23.30. **Ann:** "R. Ministerio da Educação e Cultura, transmitindo pela Cultural dos que vivem em nossa tena, pelo progresso do Brasil" – **V.** by letter.

90) C.P. 1027, Belo Horizonte, MG. **Te:** 21589 – **L.P:** Dir. Gen: E. Costa – **D.Prgr: N:** 11.00, 16.00, 22.00, 01.00 – **Ann:** "Aqui Falam PRI3, PRK5, Emissoras de ondas curtas e médias da R. Inconfidência, Belo Horizonte, Minas Gerais, Brasil" – **Int-Sig:** Gong – **V.** by QSL-card or letter. Re. in E.

91) Av. Cruz Cabuga 394, Recife, PE – **Ann:** "R. Clube de Pernambuco, a pioneira" – **V.** by QSL-card.

92) C.P. 8087, São Paulo, SP. **Te:** 334175. **Cable:** Santalina – **L.P:** Dir: M. Leuzzi Jr – **V.** by QSL-card.

93) Rua Ireneu Marinho 35, Rio de Janeiro – **L.P:** Dir. Gen: R. Marinho. Dir. Tec: L. A. de Medeiros – **D.Prgr: N:** Every h on the h to 03.00 – **Ann:** "R. Globo do Rio de Janeiro, uma emissora de "O Globo", o maior jornal do Pais" – **V.** by QSL-card. Re. in P, Sp, E, F.

94) C.P. 448, Curitiba, PR – **V.** by QSL-card.

95) Av. Miruna 713, São Paulo, SP. **Te:** 613667 – **Ann:** "PRH7 R. Panamericana, São Paulo, Brasil, a mais geuida" – **V.** by letter.

96) Ministerio da Agricultura, Largo da Misericordia 4° andar, Rio

de Janeiro – **Ann:** "R. Rural, Emissora do Agricultor do Ministerio da Agricultura, Rio de Janeiro, Brasil" – V. by QSL-card.
97) Setor Radio e TV, C.P. 95, Brasilia, DF – **L.P:** Dir: H. Cyrinho.
98) Rua Marquez do Recife, PE – **L.P:** Dir. Gen: Dr. F. Pessoa de Queiros – **Ann:** P: "R. Jornal do Comércio, Recife, Pernambuco, ondas médias e curtas" or "Emissoras da R. Jornal do Comércio, Pernambuco, a voz mais potente de Brasil" – V. by QSL-card.
99) C.P. 252, 4142, São Paulo. **Te:** 34-4181 – V. by QSL-card or letter.
100) C.P. 222, Fortaleza, CE – **L.P:** Dir: M. E. Pinheiro Campos.
101) Av. Venezuela 43, Rio de Janeiro, GB – **D.Prgr: N:** 08.55, 10.00, 10.55, 15.00, 21.50, 23.58, 00.30 – **Ann:** "R. Tupi do Rio de Janeiro, o Cacique do Ar" – V. by letter.
102) Rua Sebastião Pereira 218, São Paulo – **Ann:** "PRG9, R. Nacional, São Paulo, Brasil" – **V.** by QSL-card and letter – **F.Pl:** 150kW on mw.
103) C.P. 1164, Porto Alegre, RS. **Cable:** Pioneira – **V.** by QSL-card.
104) Praça Maua 7, 19–22° andar, Rio de Janeiro. **Te:** 438850 – **L.P:** Pres: S. C. Lopes. Dir: M. Aréas. Dir. Tec: J. Nobrega – **D.Prgr:** mw: 24 h. **N:** W 09.05, 11.00, 13.00, 15.55, 16.50(Sat only), 17.00*, 18.00*, 19.00*, 20.30*, 22.00, 23.25, 01.05, 04.00. Sun 09.05, 15.55, 21.00, 23.35. *=not Sat – **Ann:** "Ouvem R. Nacional, Rio de Janeiro, Brasil, por suas emissoras de ondas curtas, médias e frequência modulada" – **Int-Sig:** First movement of the Brazilian musical poem" Luar do Sertão" – V. by QSL-card.
105) Rua 7 de Abril 230, São Paulo – **L.P:** Pres: E. Monteiro – **Ann:** "PRE4, R. Cultura de São Paulo, transmitiendo em ondas médias, curtas e frequéncia modulada".
106) Rua S. Paulo 516, Belo Horizonte, MG.
107) C.P. 372, São Paulo, SP. **Te:** 366361. **Cable:** Radiantes – **L.P:** Pres: J. Jorge Saad. Dir. Tec: J. Oliveira – **D.Prgr:** mw: 24 h – **Ann:** "Esta é a R. Bandeirantes, por suas Emissoras de ondas médias, curtas e frequéncia modulada, em São Paulo, Brasil" – **Int-Sig:** Vibraphone and organ – **V.** by QSL-card or letter. Records accepted.
108) Rua Riachuelo 48, Rio de Janeiro, GB. **Te:** 52-8021.
109) Departamento de Segurança Nacional, Rua da Relação, Rio.
110) Av. Erasmo Braga 118, Rio de Janeiro, GB – **L.P:** Dir. Gen: M. Miranda – **D.Prgr:** mw: 10.00–03.00.
111) C.P. 471, Curitiba, PR. **Te:** 41393 – **D.Prgr:** mw: 09.00–03.00 – **ZYS47 R. Curitibana:** 09.00–02.00 – **Ann:** "Emissoras de ondas curta, médias e frequencia modulada da R. Emissora Paranaense, Curitiba, Parana, Brasil" – "ZYS47, R. Curitibana 640kc" – V. by letter and QSL-card. Re. in Sp, P, I, E, F, G.
112) Rua Mayrink Veiga 15, Rio de Janeiro. **Te:** 235991 – **L.P:** Dir: M. Leuzzi Jr – **D.Prgr:** mw: 24 h – **Ann:** "Transmite a R. Mayrink Veiga do Rio de Janeiro, PRA9 onda media, ZYZ27 e ZYZ28 ondas curtas" – V. by QSL-card. Rp. Re. in P, E, F, Sp.
113) Rua Wenceslau Braz. 78, São Paulo. **Te:** 333246 – **L.P:** Dir: D. A. Macedo, A. Zioni. Dir. Tec: A. A. Bouczan – **D.Prgr: N.** in **Portuguese:** Every half h – **Ann:** "R. Nove de Julho de São Paulo, Brasil" – V. by letter. Rp – 114) Rio de Janeiro, GB.
115) C.P. 331, Florianopolis, SC – **L.P:** Dir. Gen: Dr. P. K. Bornhausen – **Ann:** "Emissoras brasileiras de onda media e curta da R. Diario da Manhã, de Florianópolis, Santa Catarina" or "Estações de Florianópolis da R. Diario da Manhã" – V. by QSL-card.
116) C.P. 443, Manaus, AM. **Te:** 2770 – **L.P:** Dir. Gen: J. de Sousa Lima. Dir. Tec: F. Bezerra – **D.Prgr:** N: 13.30, 16.00, 19.30, 21.30. 00.30, 02.45 – **Ann:** "Esta é a R. Rio Mar de Manaus, Amazonas, Brasill operando com suas estações de Ondas Médias e Curtas, ZYB-20 e ZYB-22, nas frequencias, repectivamente, de 1480kc e 9695kc" – V. by letter. Re. in P, E, Sp.
117) Ministerio do Trabalho, Rio de Janeiro – **Ann:** "Escutam a R. Maua, a emissora do trabalhador".
118) C.P. 908, Porto Alegre, RGS – **L.P:** Dir. Gen: F. Peres. Dir. Tec: R. dos Santos – **D.Prgr:** mw: 09.00–04.00. **N:** 10.30, 11.00, 12.00, 12.30, 13.00, 13.30, 14.00, 14.30, 16.00, 17.00, 17.30, 18.00, 19.00, 03.00, 03.30, 03.55 – **Ann:** "R. Farroupilha, Porto Alegre, Brasil" – V. by letter. Re. in P, E, Sp – **Pub:** Prgr. on request.
119) C.P. 62, Goiania, GO. **Te:** 4042. **Cable:** Folhago – **L.P:** Dir. Gen: F. Braga Sobrinho. Dir. Tec: T. Rotali. Dir. Adm: J. de Almeida Cavalcante, Comm. Dir: M. G. de Santana – **D.Prgr: N:** 10.15, 11.00, 12.00, 13.00, 14.00, 15.00, 16.00, 17.00, 18.00, 19.00, 20.00, 21.00, 22.20, 02.00 – **Ann:** "Sintonizam R. Clube de Goiánia, Rede Nacional de Emissóras Associadas, Goiás falando para o Brasil" – V. by letter. Rp.
120) Curitiba, PR – 121) Rua Carlos Gomes 57, Salvador, BA.
122) C.P. 1053, Curitiba, PR – 123) Rua 15 Novembro 717, RS.
124) C.P. 18, Ribeirão Preto, SP. **Te:** 2879 – **L.P:** Dir. Gen: J. Laureano. St. Mgr: M. Simoes Filho. Dir. Tec: W. L. Perin – **Ann:** "PRA7, R. Clube de Ribeirão Preto, onda média de 730kc e ZYR206, onda curta de 15415kc" – V. by letter.
125) R.U.S.D – I.T.A, São José dos Campos, SP. **Te:** 450 – **L.P:** Dir. Gen: M. R. Cherubini. Dir. Tec: M. F. Gonzalez – **D.Prgr:** International Prgr: "Isto é o Brasil" D. 23.30 (Mon Spanish; Tues German; Wed Italian; Thurs French; Fri English; Sat Portuguese) – **Ann:** "Ouvem a ZYR232, RUSD, emissora construida, dirigida e operada por alunos do ITA. e que transmite na freq. de 17725kc, faixa de onda de 16 metros" – V. by letter and QSL-card. Records accepted. Rp – **F.Pl:** 3kW.

Medium Waves:

126) **R. Borborema,** Joao Pessoa, PB – 127) **R. Soc. Passos,** Passos, MG – 128) **R. Emis. de Recife,** Recife, PE – 129) **Soc. Radio Atlantica,** Praça Correa Melo 1, Santos, SP – 130) **R. Cataguazes,** Cataguazes, MG – 131) **R.Dif. Brasileira,** Prata, MG – 132) **R. Londrina,** PR – 133) **R. Assunção Cearense,** Fortaleza, CE – 134) **R. Dif. Cuiabá,** Cuiabá, MT – 135) **R. Dif. Triangulina,** Uberaba, MG – 136) **R. Dif. Cambará,** Cambará, PR – 137) **R. Dif. Sergipe,** Aracaju, SE.
138) **R. Santamariense,** Santa Maria, RS – 139) **R. Dif. Portoalegrense,** Rua Uruguai 155, Porto Alegre, RS – 140) **R. Cultura de Sergipe,** Aracaju, SE – 141) **Empreza Jornal do Comercio,** Limoeiro, PE – 142) **R. Soc. Ponta Grossa,** Ponta Grossa, PR – 143) **R. Mineira,** Belo Horizonte, MG – 144) **R. Cl. de Lages,** Lages, SC – 145) **R. Bela Vista,** Uberlandia, MG – 146) **R. Dif. de Minas Gerais,** João Monlevade, MG – 147) **R. Nordeste,** Macau, RN – 148) **Soc. de R. Tubá,** Tubaráo, SC – 149) **Soc. R. Hora Certa,** Praça da Liberdade 61-7°, São Paulo, SP – 150) **R. Marumby,** Curitiba, PR – 151) **R. Universal,** Santos, SP – 152) **R. Dif. Paraisense,** São Sebastião do Paraiso, MC – 153) **Universidade de Recife,** Recife, PE – 154) **R. Excelsior da Bahia,** Salvador, BA – 155) **R. Rural de Concordia,** Concordia, SC – 156) **R. Mundial,** Av. Rio Branco 181, Rio, GB – 157) **R. Itai,** Itai, RS – 158) **R. Nordeste,** Natal, RN – 159) **R. Cult. de Rio Preto,** Sao José do Rio Preto, SP – 160) **S.A. Radio Araguari,** Araguari, MG – 161) **R. Liberdade de Sergipe,** Aracaju, SE – 162) **Soc. R. Cultura de Sao Vicente,** Sao Vicente, SP – 163) **R. Paranaense,** Timoneira, PR – 164) **R. Aratiba,** Aratiba, RS – 165) **Governo do Estado de Alagoas,** Maceió, AL – 166) **Emis. Reunidas R. Cultura,** Passo Fundo, RS – 167) **R. Educadora do Nordeste Ltda,** Sobral, CE – 168) **R. Brejui Ltda,** Currais Novos, RN – 169) **R. Imembui S.A,** Santa Maria, RS – 170) **R. Iracema de Fortalesa S.A,** Juazeiro do Norte, CE – 171) **R. Soc. de Juiz de Fóra,** Juiz de Fora, MG – 172) **R. Chavantes,** Ipameri, GO – 173) **R. Campos Gerais,** Curitiba, PR – 174) **R. Rio Preto,** Sao José do Rio Preto, SP – 175) **R. Emis. Metropolitana,** Rio de Janeiro, GA – 176) **R. Cl. de Sorocaba,** Sorocaba, SP – 177) **R. Cultura de Feira de Santana,** F. Santana, BA – 178) **R. Cl. de Patos,** Patos, MG – 179) **R. Teofilo Otoni,** Teofilo Otoni, MG – 180) **R. Soc. de Friburgo,** Nova Friburgo, RJ – 181) **Universidade do Rio Grande do Sul,** Porto Alegre, RS – 182) **R. Minas,** Belo Horizonte, MG – 183) **R. Dif. de Carvaru,** Caruarú, PE – 184) **R. Piratininga de Votuporanga,** Votuporanga, SP – 185) **R. Colon,** Joinville, SC – 186) **R. Cl. de Conquista,** Vitoria da Conquista, BA – 188) **R. Emis. do Nordeste,** Flores da Cunha, RS – 189) **R. Anita Garibaldi,** Florianopolis, SC – 190) **R. Tapajóz Ltda,** Sao José dos Pinhais, PR – 191) **R. Planalto de Araguari Ltda,** Araguari, MG – 192) See 35) – 193) **R. Cultura de Gravataí,** Gravataí, RS – 194) **R. Dif. Vale do Itajaí,** Itajaí, SC – 195) **R. Acaica,** Belo Horizonte, MG – 196) **R. Presidente Wenceslau,** P. Wenceslau, SP – 197) **R. Cl. de Londrina,** Londrina, PR – 198) **R. Cariri,** Campina Grande, PB – 199) **R. Dif. de Joinville,** Joinville, SC – 200) **R. Dif. de Mossoró,** Mossoró, RN – 201) **R. Educadora de Campinas S.A,** Campinas, SP – 202) **R. Princesa do Jacui,** Candelaria, RS – 203) **Prefeitura Municipal de Passo Fundo,** Passo Fundo, RS – 204) **R. Nazareth,** Belem, PA – 206) **R. Pampa,** Porto Alegre, RS – 207) **R. Cachoeira de Itapemirim,** Cachoeira de Itapemirim, ES – 208) **R. Baré,** Cuiaba, MT – 209) **Empreza Jornal do Comercio,** Garanhuns, PE – 210) **R. Sul Riograndense,** Erechin, RS – 211) **R. Dif. do Amazonas,** Manaus, AM – 212) **Soc. Ubaense,** Ubá, MG – 213) **R. Dif. Guarapuava,** Guarapuava, PR – 214) **R. Cl. Hertz,** Franca, SP – 215) **Emis. Riograndenses,** Pelotas, RS – 216) **R. Presidente Wenceslau,** Pres. Prudente, SP – 217) **R. Capibaribe de Recife,** Recife, PE – 218) **Rede Paranaenses de Emissoras,** Ponta Grossa, PR – 219) **Emissoras Unidas,** Av. Angelica 430, Sao Paulo, SP – 220) **R. Educacao Rural,** Campo Grande, MT – 221) **R. Cl. do Piaui,** Teresina, PI – 222) **R. Gazeta de Alagas,** Maceió, AL – 223) **R. Ibituruna,** Governador Valadares, MG – 224) **R. Cultura de Maringá,** Maringá, PR – 225) **Soc. R. Carijós,** Conselheiro Lafaiete, MG – 226) **R. Cl. Metropole,** Porto Alegre, RS – 227) **R. Cultura de Cuiaba,** Cuiaba, MT – 228) **R. Dirceu de Marilia,** Marilia, SP – 229) **S. R. Dif. Cultura de Pelotas,** Pelotas, RS – 230) **R. Herval do Oeste Ltda,** Joaçaba, SC – 231) **R. Cultura de Piaui,** Teresina, PI – 232) **Soc. R. Dif. A Voz da Amazonia,** Manaus, AM – 233) **R. Operaria de Araxa,** Araxa, MG – 234) **R. Diamantina,** Diamantina, MG – 235) **Soc. Educadora de Itajuba,** Itajuba, MG – 236) **R. Cl. de Blumenau,** Blumenau, SC – 237) **Empresa Jornal do Comercio,** Triumfo, PE – 238) **R. Dif. do Pará,** Belem, PA – 239) **R. Arapuan Ltda,** João Pessoa, PA – 240) **R. Gurupi,** Sao Luis, MA – 241) **R. Soc. Oeste Catarinense,** Chapecó, SC – 242) **R. Guaratm,** Santa Maria, RS – 243) **R. Dif. Sul da Bahia,** Itabuna, BA – 244) See 27) – 245) **R. Estadual,** Canoinhas, SC – 246) **R. Uirapuru de Fortalesa,** Fortalesa, CE – 247) **R. Alvorada,** Marau, RS – 248) **R. Continental do Recife S.A,** Recife, PE – 249) **R. Dif. de Iguape,** Osasco, SP – 250) **R. Tingui,** Piraquara, PR – 251) **R. Sul Fluminense,** Barra Mansa, RS – 252) **Empresa Jornal do Comercio,** Pesqueira, PE – 253) **R. Jornal de Minas,** Belo Horizonte, MG – 254) **R. Educadora de Cariri,** Cariri, CE – 255) **R. Dif. de Rio Preto,**

São José do Rio Preto, SP – 256) **R. America,** Rua Consolação 166, São Paulo, SP – 257) **R. Tamoio,** Fortaleza, CE – 258) **Soc. R. Imbiara de Araxá,** Araxá, MG – 259) **R. Triunfo,** Porto Alegre, RS – 260) **R. Vera Cruz,** Rua Buenos Aires 168, Rio, GB – 261) **R. Cl. de Teresina,** Teresina, PI – 262) **R. Cl. de Tupá,** Tupá, SP – 263) **R. Bare,** Manaus, AM – 264) **R. Cl. de Santos,** Santos, SP – 265) **R. Caturite,** Campina Grande, PB – 266) **Campos Dif,** Campos, RJ – 267) **R. Coroados,** Curitibanos, SC – 268) **R. Iracema de Fortaleza,** Praça M. Linhares, Sobral, CE. **Te:** 477. **Cable:** "Radiracema" – **L.P:** Dir. Gen: J. M. Soares. Dir. Tec: S. Freitas – **D.Prgr:** 09.00–02.00 – **V.** by letter – 269) **R. Cl. de Rio Claro,** Rio Claro, SP – 270) **R. Emis. Convenção do Itu,** Itu, SP – 271) **R. Soc. Muriaé,** Muriaé, MG – 272) **R. Espinhares de Patos,** Patos, PB – 273) **R. Cl. Epitacio,** Pres. Epitacio, SP – 274) **R. Progresso,** Novo Hamburgo, RS – 275) **R. Araripe,** Crato, CE – 276) **Soc. Emiss. Continental,** Campos, RJ – 277) **R. Dif. A Voz de Bage,** Bage, RS – 278) **Soc. R. Novo Horizonte,** Novo Horizonte, SP – 279) **R. Nordeste,** Nova Cruz, RN – 280) **R. Cultura do Nordeste,** Caruaru, PE – 281) **R. Cultura de Santo Amaro,** Santo Amaro, BA – 282) **R. Jornal de Maringa,** Maringa, PR.

Brown Boveri, Switzerland, delivered 100kW sw-tr. (R. Tupi). Telefunken A.G, Germany, delivered 50kW sw-tr. (R. Nacional, Rio de Janeiro).

CHILE

L.T: GMT–4 h – **Pr.L:** Spanish.

ASOCIACION DE RADIODIFUSORAS DE CHILE (ARCHI)
ADDR: Cas. 10476, Santiago de Chile. **Cable:** Archi. **Te:** 34509 – **L.P:** Pres: R. Vergara Santa Cruz. Mgr: J. Menadier Carrasco.
STATIONS: All st's comm. exc. 10), 59), 87) (Cultural) – **S.W:** Call letters CE are used for all zones – **M.W:** Call letters CA, CB, CC and CD indicate: A=No. Zone, B=Central Zone, C=So. Zone and D=Antartic Zone. The figures indicate the frequency in kc minus one cipher, f. inst. CB82=Central Zone 820kc.

St's not associated with ARCHI: 13), 32), 33), 35), 50), 73), 91), 99), 108).

Short Wave: *=inactive.

	Call	kc	m	kc	Name	h of tr.
1)	CE597	5975	50.21	1	Emis. Presidente Balmaceda:	10.00–05.00
2)	CE600	6000	50.00		R. El Carbon, Lota	
3)	CE601	6010	49.92	1	R. Norte, Antofagasta	10.50–04.30
4)	CE602	6020	49.83	1	Diego Portales, Santiago	11.00–05.00
5)	CE604	6040	49.67	0.25	R. Libertad, Antofagasta	11.00–04.00
6)	CE607	6070	49.42	5	Soc. Nac. de Mineria	11.00–05.30
7)	CE610	6100	49.18	1	R. Calama	11.00–04.00
8)	CE611	6110	49.10	5	Soc. Nac. de Agricultura	11.00–05.00
9)		*6130	48.94	1	R. El Morro, Arica	
10)	CE613	6135	48.90	10	R. Universidad de Concepción:	12.00–04.00
11)	CE615	*6150	48.78	5	La Voz de Chile, Valparaiso	
12)	CE619	6190	48.47	10	Corp. Chilena Broadc.	11.00–04.00
12)	CE950	9500	31.58	1	Corp. Chilena Broadc.	11.00–04.00
13)	CE955	9550	31.41	1	R. Valentin Letelier, Valparaiso Mon-Fri. 16.30–18.00, Sat/Sun 20.00–03.00	23.00–03.00;
1)	CE960	9600	31.25	10	R. Pres. Balmacéda, Santiago	10.00–05.00
14)	CE965	9650	31.09	1	R. Yungay, Santiago	11.30–06.30
11)	CE970	9700	30.93	10	La Voz de Chile, Santiago	10.50–04.30
15)	CE1174	11740	25.55	5	R. Nuevo Mundo, Santiago	11.00–04.30
8)	CE1180	11800	25.42	1	Soc. Nac. de Agricult.	11.00–05.00
16)	CE1185	11850	25.32	2.5	R. Cruz del Sur, Santiago	11.00–04.00
11)	CE1190	11900	25.21	5	La Voz de Chile, Valparaiso	10.50–04.30
6)	CE1196	11960	25.08	5	Soc. Nac. de Mineria	11.00–05.30
6)	CE1511	*15115	19.85	5	Soc. Nac. de Mineria	
12)	CE1515	15148	19.80	1	Corp. Chilena Broadc.	11.00–04.00

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Medium Waves: °=Short Wave.

	Call	kc	kW		Call	kc	kW		Call	kc	kW
17)	CB54	540	1	46)	CC96	960		74)	CD134	1340	0.15
8)	CB57	°570	15	47)	CD96	960	3	75)	CA135	1350	0.25
4)	CB59	590	50	7)	CA97	°970	1	76)	CC135	1350	1
18)	CC59	590	1	48)	CD97	970		76a)	CD135	1350	
19)	CA59	590		14)	CB101	°1010	1	77)	CD136	1360	2.5
20)	CB62	620	2	49)	CD101	1010	1	78)	CB136	1360	0.5
21)	CA63	630	0.25	13)	CB103	1030	1	79)	CD137	1370	1
22)	CB63	630	1	50)	CD103	1030	10	16)	CB138	°1380	2.5
23)	CD63	630	1	51)	CA103	1030		80)	CC140	1400	
24)	CA64	640	0.5	6)	CB106	°1060	100	81)	CD140	1400	
25)	CC64	640	1	52)	CA108	1080	1	82)	CA141	1410	
26)	CB66	660	50	4)	CC108	1080	1	83)	CB141	1410	1
27)	CC67	670		53)	CA109	1090	0.25	84)	CC141	1410	1
6)	CB68	680	1	55)	CD109	1090		85)	CA142	1420	
28)	CC68	680	10	56)	CB111	1110	1	86)	CA142	1420	
29)	CB69	690	10	57)	CD111	1110	1.25	87)	CB143	1430	0.25
30)	CD69	690	1.2	12)	CB114	°1140	50	88)	CC143	1430	0.1
31)	CA70	700	0.25	58)	CC116	1160	1.5	89)	CC144	1440	1
11)	CB73	°730	10	4)	CB118	°1180	50	90)	CC145	1450	
11)	CB76	°760	75	59)	CB120	1200	1	91)	CD145	1450	2.5
32)	CB78	780	1	60)	CA120	1200		92)	CB146	1460	0.1
33)	CA82	820	0.5	61)	CA121	1210	0.25	93)	CD146	1460	0.25
34)	CB82	820	1	8)	CD121	1210	10	94)	CA147	1470	0.1
35)	CD82	820	1	62)	CB124	1240	0.25	95)	CB147	1470	0.25
36)	CB84	840	1	63)	CB125	1250	1	96)	CC147	1470	0.25
37)	CC84	840	0.8	64)	CC125	1250	1	97)	CC148	1480	0.25
38)	CD84	840	1	9)	CA126	°1260	10	98)	CB149	1490	
39)	CB89	890	1	65)	CB126	1260	1	99)	CB150	1500	0.5
40)	CC89	890		3)	CB127	°1270	1	100)	CC151	1510	
41)	CD89	890	1	66)	CC127	1270	0.25	101)	CA152	1520	0.5
10)	CC89	°890	1	67)	CD127	1270	1	102)	CC152	1520	0.25
5)	CA90	°900	1	1)	CB130	°1300	10	103)	CB153	1530	0.25
8)	CB90	°900	1	68)	CB132	1320	1	104)	CB154	1540	0.25
42)	CC90	900	0.1	69)	CD132	1320	1	105)	CC155	1550	
43)	CD90	900		70)	CA132	1320		106)	CD155	1550	
15)	CB93	930	20	71)	CB133	1330	1	107)	CB156	1560	1
44)	CA96	960	0.3	72)	CC133	1330	0.15	2)	CC157	°1570	
45)	CB96	960	10	73)	CB134	1340	1	108)	CB160	1600	

Short Waves:

1) Cas. 13650, Santiago. **Te:** 88720. **Cable:** Prebal – **L.P:** Dir. Gen: J. A. de Wetzig. St. Mgr: R. Deformes R – **D.Prgr:** N: 10.00, 11.05, 17.15, 01.30, 04.40+short N. every h on the h – **Int-Sig:** Gong with notes from "Los Copihues Rojos".

V. by QSL-card. Records accepted – **F.Pl:** CB130 50kW.
2) Cas. 66, Lota. **Te:** 63 – **L.P:** N. Mosciatti.
3) Cas. 556, Antofagasta. **Te:** 383 – **L.P:** J. Cvitanic – **D.Prgr:** N: 11.30, 12.15, 17.00, 17.15, 00.15, 02.00+short N. every h.
4) CB118/CE602: Cas. 13962, Santiago. **Te:** Santiago 68279. CC108: 4) CB118/CE602: Cas. 13962, Santiago. **Te:** Santiago 68279. CB59: Cas. 98V, Valparaiso. CC108: Cas. 21-D, Talca – **L.P:** Dir. Gen: R. Tarud S. Dir. Tec: A. Hasbun A – **D.Prgr:** N: 11.30, 12.00, 13.00, 14.00, 15.00, 16.00, 19.00, 20.00, 21.00, 22.00, 23.00, 04.57.
5) Cas. 457, Antofagasta. **L.P:** A. Cajiao – **D.Prgr:** N: 12.00, 17.30, 01.00, 02.30.
6) CB106: Cas. 2626, Santiago. **Cable:** Radiomineria. **Te:** 381341. CB68: Cas. 337, Vina del Mar – **L.P:** CB106: Dir. Gen: O. Ruiz, B. Suárez. Dir. Prgr: R. Rojas R. Dir. Tec: R. Fuentes A. CB68: Mgr: L. Muñoz – **D.Prgr:** N: 10.00, 11.00, 12.00, 16.45, 17.30, 01.00, 01.45, 02.30 – **Ann:** "Santiago de Chile, R. Soc. Nac. de Mineria" – **Int-Sig:** Gong – **V.** by QSL-card. Re. in E or Sp.
7) Cas. 1, Calama. **Te:** 10 – **L.P:** Dir: P. Vergara Keller. Dir. Tec: S. Wierckinsky – **D.Prgr:** N: 11.02, 12.00, 16.45, 17.30, 00.15, 02.30 – **Ann:** "Transmite CA97, CE610 en 49 metros, R. Calama de Calama, República de Chile" – **V.** by letter. Records accepted.
8) CB57: Cas. 40-D, Santiago. **Te:** 64660. CB90: Cas. 90, Valparaiso. **Te:** 6891. CD121: Cas. 327, Los Angeles. **Te:** 517. **L.P:** CB57: Dir: F. Echeverria M – **D.Prgr:** N: 11.30, 13.00, 15.00, 16.00, 17.00, 19.00, 21.00, 23.00, 00.00, 01.00, 03.00, 04.00 – **V.** by QSL-card.
9) Cas. 463, Arica – **L.P:** Dir: C. Nieto G – **D.Prgr:** 11.00–06.00. **V.** by letter.
10) Cas. 2337, Concepción. **Te:** 23207 – **L.P:** Mgr: F. Dussuel. Dir. Tec: O. Sa. Martin – **D.Prgr:** N: 12.15, 17.15, 01.30. **Wrp:** 01.30. **L.L:** French 14.30, 23.30 – **Ann:** "Transmite R. Universidad de Concepción CC68 en Onda Larga, CE613 en Onda Corta en la Banda de 49 metros y con su equipo de Frequencia Modulada en 95.1 megaciclos, desde la Ciudad Universitaria, Concepción, Chile – **V.** by QSL-card and letter. Re. in E, Sp – **Pub:** Prgr.schedule on request.

11) CB76/CE970: Cas. 13130, Santiago. CB73/CE1190: Cas. 37V, Valparaiso. **Cable:** Vitalradio. **AD:** 15 min. per h – **L.P:** CB76: Exec. Pres: C. A. Vial E. CB73: Gen. Mgr: R. Reyes B. Dep. Gen. Mgr: V. Tischenko G. Dir. Tec: R. Renard S – **D.Prgr: N:** CB76/CE970: 11.30, 12.15, 13.00, 16.00, 16.45, 17.15, 18.00, 19.00, 19.20, 20.00, 21.00, 22.00, 23.00, 00.15, 02.00; CB73/CE1190: 11.00, 11.30, 12.00, 13.00, 14.00, 15.00, 16.00, 16.45, 17.15, 18.00, 19.00, 20.00, 21.00, 22.00, 22.30, 00.00, 02.00, 03.00, 04.00 – **Ann:** "Emisoras La Voz de Chile, La Cooperativa". All st's simultaneously: "Transmite La Cadena Radial, La Voz de Chile, por sus estaciones R. La Cooperativa" – **Int-Sig:** Gong with central theme of "Pomp and Circumstance" – **V.** by QSL-card and letter. Records accepted.
12) Cas. 244V, Santiago – **L.P:** Dir: S. Fernandez – **D.Prgr: N:** Every h on the h – **Ann:** "Transmite CB114, R. Corporación, Santiago de Chile, R. Corporación en el mejor lugar, su hogar".
13) Escuela de Derecho Universidad de Chile, Box 211V, Valparaiso – **L.P:** Dir: R. Allu – **Ann:** "Esta es R. Valentin Letelier, de la Escuela de Derecho de Valparaiso, de la Universidad de Chile, transmitiendo on Onda Larga CB103, en 1030kc, en Onda Corta CE965, en 9550kc, y en Frequencia Modulada CE104.3 en 104.3Mc por segundo" – **V.** by QSL-card or letter. Re. in Sp or E.
14) Cas. 3041, Santiago – **Ann:** "CB101 y CE766 Estaciones de R. Yungay de la Corporación de Radiodifusion, Santiago de Chile" – **Int-Sig:** First movement of the song "Donde el Azul de la Noche encuentra el Ove del Dia" – **V.** by letter.
15) Cas. 9255, Santiago. **Cable:** R. Nuevo Mundo. **Te:** 382392 – **L.P:** Dir. Gen: J. Raggio – **D.Prgr: N:** 11.30, 12.30, 13.00, 14.00, 15.00, 16.00, 18.00, 19.00, 20.00, 21.00, 22.00, 23.00, 01.00. 03.00 – **Ann:** "Estas son Las Emisoras Nuevo Mundo de Santiago de Chile que transmiten por CB93, CE1174 estacion de Onda Corta en la banda de 25 metros y su equipo de FM en 93Mc" – **V.** by QSL-card and letter. Re. in Sp, E.
16) Plaza Bulnes 47, Santiago – **L.P:** Mgr: Claudio Poblete – **D.Prgr: N:** 12.10, 17.45, 01.45, 04.45 – **FM:** 95.3Mc – **V.** All re. to be sent to Sr. V. Hugo Olguin D, Departamento de Relaciones Internacionales, and will be answered by QSL-card or letter – **F.Pl:** 50kW mw-tr.

Medium Waves:
17) **R. Ignacio Serrano,** Ugalde 615, Claudio.
18) **R. Condor,** Ca. 486, Concepción. **D.Prgr:** 11.00–04.00.
19) **R. Mineria,** Hotel Turismo, Antofagasta – **L.P:** Dir: A. Lieux.
20) **R. La Reina,** Cas. 244V, Santiago. **L.P:** Dir: M. Lavin.
21) **R. Esmeralda,** Cas. 209, Iquique. **Te:** 572.
22) **R. Pres. Prieto,** Cas. 37V, Valparaiso.
23) **R. Sur,** Cas. 60-D, Valdivia. **D.Prgr:** 11.00–04.00.
24) **R. Norte Verde,** Cas. 252, Ovalle. **L.P:** Dir: F. Morales.
25) **R. El Sur,** Cas. 482, Concepción. **L.P:** Dir: J. Valenzuela.
26) **R. Chilena,** Cas. 10277, Santiago. **L.P:** Dir: E. Menchaca.
27) **R. El Libertador,** Rubio 259, Rancagua.
28) **R. Lautaro,** Cas. 214, Talca. **L.P:** E. Tarud.
29) **R. Santiago,** Cas. 10195, Santiago – **L.P:** Dir. Gen: R. Vergara. Dir. Tec: P. del Campo. **D.Prgr: N:** 11.30, 17.00, 00.45, 01.30. **English** 02.30–03.00. **Ann:** "CB69 y CE97.1 R. Santiago, en Santiago de Chile".
30) **R. La Frontera,** Cas. 516, Temuco – 31) **R. Coya,** Maria Elena, Antofagasta, or Cas. 13260, M. Elena.
32) **R. Caupolican,** Cas. 506. Valparaiso – 33) **R. del Salitre,** Cas. 7-D, Iquique.
34) **R. Del Pacifico,** Cas. 3591, Santiago – **L.P:** Dir: R. Vivado & J. Quinteros. **D.Prgr:** 24 h – 35) **R. Concordia,** Cas. 119, La Union.
36) **R. Recreo,** Cas. 596, Viña del Mar. **L.P:** Mgr: J. Gonzales. Dir. Tec: J. C. Tribuzio. **D.Prgr:** 12.00–04.00.
37) **R. Almirante Latorre,** Cas. 358, Talcahuano. **L.P:** Dir: A. Deij.
38) **R. Sago,** Cas. 35-O, Osorno. **Cable:** Radiosago. **L.P:** Dir: Roberto Luna. **D.Prgr:** 11.30–04.00.
39) **R. Bulnes,** Cas. 1555, Santiago. **L.P:** Dir: C. Briceño.
40) **R. Interamericana,** Cas. 97, Concepción. **L.P:** Dir: M. Fonseca.

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A fin de emplear el WRTH sin dificultades ofrecemos a todos nuestros lectores, que hablan el castellano, un vocabulario inglés-español que contiene todas palabras y frases que se utilizan por lo general en todos resumens y tablas en el manual. Este vocabulario capacitará a todas personas con un poquito o sín conocimiento ninguno al idioma inglés para entender y emplear el WRTH sin difficultades. Si quiere un ejemplar, libre de gastos, sírvase escribír a

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41) **R. Polar,** Cas. 13-D, Punta Arenas. **L.P:** Dir: P. Torreso. **D.Prgr:** 11.30–04.00. **V.** by letter.
42) **R. El Roble,** Cas. 37, Parral. **L.P:** Dir: J. Rogazy.
43) **R. Vicente Perez Rosales,** San Felipe 80, Puerto Montt.
44) **R. Riquelme,** Cas. 92, Coquimbo – 45) **R. José Miguel Carrera,** Tenderini 115, piso 9, Santiago – 46) **R. Condell,** Yungay 10, Curico.
47) **R. Camilo Henriquez,** Cas. 28-A, Valdivia.
48) **R. Payne,** Cas. 97, Puerto Natales. **L.P:** J. Navarro.
49) **R. Llanquilhue,** Cas. 356, Puerto Montt. **D.Prgr:** 11.00–04.00.
50) **R. Cautin,** Cas. 40-D, Temuco. **L.P:** Dir: M. Fernández M.
51) **R. La Portada,** Cas. 410, Antofagasta. **L.P:** Sra. Raymunde Prieta.
52) **R. La Serena,** Cas. 118, La Serena – 53) **R. Toco,** Cas. 808, Tocopillo.
54) see no. 100) – 55) **R. Chiloé,** Chiloé. **L.P:** Dir: F. Mihovilovic.
56) **R. Viña del Mar,** Cas. 534, Viña del Mar.
57) **R. Austral,** Cas. 40-D, Punta Arenas. **L.P:** Dir: J. Navarro.
58) **R. Simon Bolivar,** Cas. 318, Concepción. **L.P:** Dir: A. Jaén.
59) **R. Universidad Tecnica del Estado,** Avda. Ecuador 3469, Santiago. **Te:** 92981. **L.P:** Dir: M. T. Femenias. Dir. Tec: J. Arenas K. **D.Prgr:** 17.00–04.00. **N:** 17.30, 02.00.
60) **R. El Litoral,** Cas. 2001, Tocopilla. **L.P:** Dir: Antonio Arce.
61) **R. Atacama,** Cas. 57, Copiapo. **Te:** 171.
62) **R. Valparaiso,** Cas. 1096, Valparaiso. **L.P:** Dir: J. O'Shee.
63) **R. Andrés Bello,** Mac Iver 142, Santiago – **L.P:** Mgr: J. Morris.
64) **R. Talca,** Cas. 450, Talca – 65) **R. Nacional,** Cas. 9987, Santiago.
66) **Nueva R. Ñuble,** Cas. 267, Chillan. **L.P:** Dir: H. Vaccaro.
67) **R. Patagonia Chilena,** Cas. 53, Coyhaique.
68) **R. Porteña,** Cas. 887, Valparaiso.
69) **R. Baquedaño,** Cas. 758, Valdivia. **L.P:** Gen. Mgr: C. Cockbaine.
70) **R. Calama,** Cas. 1, Calama. **L.P:** Dir: P. Vergara.
71) **R. Prat,** Cas. 10210, Santiago. **L.P:** Dir: P. Valenzuela. **D.Prgr:** 11.00–05.40. **Ann:** "Esta es CB97 todo el dia informando".
72) **R. Discusión,** Cas. 14-D, Chillan. **L.P:** Dir: A. Lagos.
73) **R. Cervantes,** Cas. 4650, Santiago. **L.P:** Dir: G. Holtehuer.
74) **R. Malleco,** Cas. 204, Victoria. **L.P:** Dir: G. Servanti.
75) **R. Pampa,** P. de Valdivia – 76) **R. Minerva,** Cas. 339, Rancagua.
76a) **R. General Marchant,** Puerto Ausén. **L.P:** Dir: D. Martinez.
77) **La Voz del Sur,** Cas. 53, Punta Arenas. **D.Prgr:** 11.30–04.00 – **V.** by letter – 78) **R. Panamericana,** Alameda 924, Santiago.
79) **R. Eleuterio Ramirez,** Ramirez 652, Osorno.
80) **R. Rengo,** Urriola 85, Rengo. **L.P:** Dir: F. Gandarillas.
81) **R. Pudeto,** Edif. Yuri, Ancud. **L.P:** Dir: José Leal.
82) **R. Antofagasta,** Cas. 439, Antofagasta. **L.P:** Dir: A. Garcia.
83) **R. Chacaburo,** Cas. 370, Quillota – 84) **R. Araucania,** Cas. 462, Concepción. **L.P:** Dir: R. Arjona – 85) **R. Chañaral,** Comercio 53, Chañaral. **L.P:** Dir: Hoguer Garrao – 86) **R. Alonso de Ercilla,** Cas. 369, Illapel. **L.P:** H. Pinochet.
87) **Univ. Tecnica Santa Maria,** Cas. 110-V, Valparaiso. **L.P:** Dir: C. Ceruti. Dir. Tec: G. Feik. **D.Prgr:** 01.00–02.30.
88) **R. Independencia,** Cas. 132, Molina. **L.P:** Dir: J. Aravena C. **D.Prgr:** 11.00–06.00. **V.** by QSL-card.
89) **R. El Cobre,** Cas. 125, Rancagua. **L.P:** Dir: Julio Romero.
90) **R. Central,** Cas. 202, San Carlos. **L.P:** Dir: Victor Busto.
91) **R. Turismo,** Puerto Varas – 92) **R. Magallanes,** Cas. 13940, Santiago – 93) **R. Arauco,** Cas. 6, Angol. **L.P:** Dir: J. Abasolo.
94) **R. Estrella del Norte,** Cas. 13, Vallenar. **L.P:** Dir: L. Morales.
95) **Trasandina,** Cas. 307, Los Andes – 96) **R. Maule,** Cas. 196, Cauquenas – 97) **R. Manuel Rodriguez,** Cas. 147, San Fernando – 98) **R. Limache,** Cas. 92, Limache – 99) **R. Sudamerica,** Cas. 1346, Santiago.
100) **R. Rancagua,** Cas. 21, Rancagua. **L.P:** Dir: J. Romero.
101) **R. Almirante Lynch,** Vivar 489, Iquique. **L.P:** Dir: L. Roldán.
102) **R. Soberania,** Cas. 11-D, Linares. **L.P:** Dir: R. Abasolo.
103) **R. Aroncagua,** Cas. 100, San Felipe. **L.P:** Dir: R. Grez Gonzáles.
104) **R. Chronos,** Plaza Bulnes 79, Santiago.
105) **R. Centenario,** Cas. 18, San Javier. **L.P:** Dir: Mario Gaete.
106) **R. Regional,** Cas. 293, Traiguen. **L.P:** Dir: Hugo Cuadra.
107) **R. Sargento Aldea,** Cas. 38, San Antonio. **L.P:** Dir: R. Filippi.
108) **R. Provincial,** Cas. 73, Putaendo.

COLOMBIA

L.T: GMT – 5 h – **Pr.L:** Spanish.
STATIONS: a) Go. st's – b) Cultural – c) Cultural or non-comm, private – d) to m) Comm. networks – n) Comm. st's – y) & z) Professional Association.
Hours of tr: 12.00–05.00 exc. where indicated.
Short waves: Call HJ---. *=inactive.

	Call	kc	m	kW	Name & h of tr.
1)	GW	3250	92.31	10	Accion Cult. Popular, Bogota b)
2)	AB	3290	91.18	25	Inst. Nac. de Radio y TV, Bogota a)
3)	GI	4755	63.09	2.5	Reina de Colombia, Chiquinquira c)
4)	KW	4775	62.84	1	La Voz de Maria, Bogota c)
5)	FU	4795	62.57	1	La Voz del Comercio, Armenia e)
6)	AU	4805	62.43	0.5	Universidad de Antioquia, Medellin c)
7)	HC	4825	62.18	1	R. Nariño, Pasto: 10.45–05.00 e)
8)	AM	4835	62.05	1	R. Buenaventura n)
9)	GF	4845	61.92	1	R. Bucaramanga: 11.00–04.00 q)

Colombia

	Call	kc	m	kW	Name & h of tr.
10)	FV	4855	61.79	1	R. Néiva: 11.00–04.30 d)
11)	BG	4875	61.54	2.5	La Voz del Norte, Cucuta n)
12)	CH	4895	61.29	5	La Voz de la Victor, Bogota n)
13)	AG	4905	61.16	1	Emis. Atlantico, Barranquilla: 11.30–04.00 z)
2)	CQ	4955	60.54	25	Inst. Nac. de Radio y TV, Bogota a)
14)	AE	4965	60.42	2.5	R. Santa Fé, Bogota, 24 h n)
15)	GV	4985	60.18	10	Transmis. Independencia, Tunja n)
16)	FW	5020	59.76	10	Transmis. Caldas, Manizales 24 h e)
17)	IC	5035	59.58	1	La Voz del Caqueta, Florencia n)
18)	NE	5040	59.52	1	R. El Sol, Cali 11.00–05.00 f) z)
1)	GC	5075	59.11	25	Accion Cultural Popular, Bogota 10.20–03.10 b)
1)	GG	5095	58.88	50	Accion Cultural Popular, Bogota 10.20–14.00, 19.00–03.10 b)
19)	CF	5960	50.34	1	Voz de Bogota 11.00–04.00 i)z)
20)	KA	5970	50.25	1	R. Horizonte, Bogota: 12.00–03.00 n)
21)	LY	5980	50.17	1	La Voz del Rio Grande, Medellin 11.00–07.00 f)
22)	FQ	5995	50.64	1	La Voz del Pueblo, Peréira 12.00–04.00 f)
23)	FK	6010	49.92	1	La Voz Amiga, Peréira 12.00–04.00 i)
2)	ZI	6030	49.75	1	Inst. Nac. de Radio y TV, Bogota a)
24)	CB	6040	49.67	10	La Voz del Tolima, Ibaqué f)
25)	EK	6055	49.55	5	R. Pacifico, Cali e)
1)	GC	6075	49.38	10	Accion Cultural Popular, Bogota 10.20–03.10 b)
26)	DX	6085	49.30	1	Ecos de Pasto d)
27)	IQ	6095	49.22	1	La Voz del Llano, Villavicencio: 13.00–05.00
28)	NB	6105	49.14	1	R. Visión, Medellin 10.30–05.30 hm)z)
29)	KE	6125	48.98	1	R. Continental, Bogota 10.00–05.30 f)z)
30)	ED	6145	48.82	1	La Voz del Cauca, Popayan f)z)
31)	KJ	6160	48.70	10	Emis. Nueva Granada, Bogota e) 10.00–06.00
2)	CT	6180	48.54	25	Inst. Nac. de Radio y TV, Bogota a)
32)	EZ	6195	48.43	1	La Voz de Cali 11.00–05.00 f)z)
2)	ZM	*9635	31.14	25	Inst. Nac. de Radio y TV, Bogota a)
1)	GQ	*9750	30.76	10	Accion Cultural Popular, Bogota b)
2)	ZN	*11795	25.43	25	Inst. Nac. de Radio y TV, Bogota a)
2)	ZO	*11825	25.37	25	Inst. Nac. de Radio y TV, Bogota a)
1)	GL	*15235	19.69	10	Accion Cultural Popular, Bogota b)
2)	ZP	*15335	19.56	25	Inst. Nac. de Radio y TV, Bogota a)
2)	ZQ	*17865	16.79	25	Inst. Nac. de Radio y TV, Bogota a)
2)	ZR	*21510	13.94	25	Inst. Nac. de Radio y TV, Bogota a)
2)	ZS	*25750	11.65	25	Inst. Nac. de Radio y TV, Bogota a)

Medium Waves: Call: HJ—. °) also on SW

Call	kc	kW	Call	kc	kW
20) KA	°540	10 n	1) CY	°810	10 b
2) HF	*550	10 a	49) ED	820	50 d
15) GS	°560	10 n	28) DM	°830	10 hm, z
2) ND	°570	100 a	50) BI	840	10 q
2) HG	*580	50 a	51) KC	850	50 d
1) CR	°590	10 b	52) EP	860	10 f
33) HJ	600	10 n	24) LA	°870	10 f
31) KL	°610	25 e	53) NW	880	30 n
34) EL	620	10 g	54) HO	890	10 n
35) FD	630	20 f, z	19) CE	°890	10 i, z
36) BJ	640	10 e, j	32) EY	°900	10 f, z
23) KH	°650	10 i	21) DO	°910	10 f
37) NX	670	10 g	55) AE	920	10 k, z
38) AQ	680	10 e, j	29) CS	°930	10 f, z
39) CZ	690	10 hm, z	56) GB	940	10 i, y
1) EU	*700	10 b	57) EN	950	10 d
40) FT	710	10 d	2) HK	960	10 a
41) AN	720	10 k	12) CI	°970	10 n
42) CU	730	10 g	18) ES	°980	10 f, z
26) HB	°740	10 d, z	58) DB	990	10 e
43) DK	750	50 d	2) BU	1000	10 a
44) AJ	760	10 e, j	59) CC	1010	10 hm, y
45) JX	770	30	60) DQ	1020	1 f, z
46) ZG	780	10 n	22) FQ	°1020	10 f
47) DC	790	10 d, hm	25) ER	°1030	10 e
48) BW	800	10 f	9) GE	°1030	10 q

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Sundsvej 6, Hellerup, Denmark.

Call	kc	kW
61) AI	1040	5 hm, z
62) CJ	1040	10 g
63) DR	1050	1 n
64) NG	1050	5 f
16) FJ	°1060	10 e
14) CG	°1070	10 n
13) AH	°1070	1 z
65) DZ	1080	1 d
66) JF	1080	10 f, z
67) FM	1090	10 f, z
68) BC	1090	10 d
69) AT	1100	1 d
70) CN	1100	10 d
71) DI	1110	9 c
72) EW	1110	1 d
73) KQ	1120	10 l
74) EO	1120	10 y
75) AC	1130	10 f, j
76) CO	1130	1 g
77) JC	1130	1 f, z
78) TR	1140	10 f
79) DL	1140	1 i
80) EV	1140	1 n
1) GJ	°1150	10 b
81) FI	1150	1 d
82) CK	1160	10 y
83) NH	1160	1 f, z
84) AZ	1160	5 k, y
85) JE	1170	1 f
86) DT	1170	1 z
86a) DP	1170	1 n
87) GK	1180	10 e
88) FX	1180	1 d
89) CV	1190	1 f
90) CT	1190	5 n
91) NB	1190	10 n
92) NF	1200	1 q
93) CD	1200	1 n
94) IJ	1200	1 n
27) BX	°1200	1 f
95) BE	1210	1 n
23) FF	°1210	10 i
96) NM	1220	2.5 n
97) AV	1220	2 e, j
98) KR	1220	10 n
99) FV	1220	1 d
10) FP	°1230	1 n
100) LK	1230	1 n
101) IL	1230	5 z
102) GN	1240	5 d
103) TI	1240	5
5) FG	°1240	5 e, h
8) JA	°1240	1 d
104) KW	1250	10 n
105) AO	1250	1 k, z
106) HZ	1250	1 c
107) HS	1250	1 f
108) ET	1260	1 hm
109) NC	1260	1 g
110) NO	1260	1 l
111) DA	1260	1 h
112) HU	1260	1 n
113) KZ	1270	1 hm
114) TX	1270	1 hm
115) EB	1270	1 n
116) LR	1280	1 n
117) KN	1280	2.5 g
118) AR	1280	5 j
119) EC	1290	1 y
120) TH	1290	1 q
121) LA	1290	1 d
122) KY	1290	1 n
123) CM	1290	1 n
124) BK	1300	2 n
125) NB	1300	1 n
126) LD	1300	1 z
127) AK	1310	2.5 i, z
128) JZ	1310	1 d, y
129) LB	1310	1 f, z
130) ZU	1310	1 f
131) TH	1320	1 n
132) NK	1320	1 n
133) FR	1320	1 e, y
134) HY	1330	1 n
135) FE	1330	5 e

Call	kc	kW
136) GU	1330	1 f, y
137) FB	1340	1 n
138) AD	1340	1 k, z
11) BF	°1340	1 n
7) HA	°1340	1 e
139) EN	1350	1 z
140) FY	1350	1 f
141 DS	1350	1 g
142) HW	1350	1 n
143) FH	1360	1 e
144) GI	1360	1 n
145) NI	1360	1 d
146) KX	1370	1 n
147) BO	1370	1 n
148) BD	1370	1 f
30) EA	°1370	1 f, z
149) NU	1380	1 n
150) LG	1380	1 d
151) EJ	1380	1 e, y
152) KD	1380	1 n
153) TJ	1390	1 n
154) FO	1390	1 z
155) NY	1390	1 f
156) KM	1400	0.25 c
157) AS	1400	1 n
158) ZV	1400	1 c
159) BK	1400	1 e
160) EI	1410	1 hm, z
161) BH	1410	1 d
6) DU	°1410	1 c
162) FS	1410	2 d
163) HM	1420	1 hm
164) GH	1420	1 d
4) KU	°1430	0.25 c
165) AP	1430	1 d
166) EG	1430	1 n
167) BP	1430	1 f, z
168) FL	1440	1 e
169) BZ	1440	1 n
170) NZ	1440	1 n
171) EK	1440	1 hm, z
17) IB	°1440	1 n
172) GM	1440	1 e
173) NL	1450	1 n
174) AL	1460	1 n
175) JW	1460	1 n
176) BA	1460	1 c
177) FZ	1470	1 n
178) NT	1470	1 f
179) IM	1470	1 n
180) BL	1470	1 q
181) FC	1480	1 q
182) AW	1490	1 n
183) BS	1490	1 n
1) EH	°1490	1 b
184) NS	1490	1 f
185) CL	1500	1 d
186) LK	1500	1 c
187) GA	1500	1 l
188) TW	1500	1 n
189) ZH	1500	1 n
190) HX 10	15	1 i
191) ZA	1510	1 d, hm
192) LK	1520	1 n
193) GX	1520	1 n
194) LI	1520	1 q
195) LS	1520	1 d
196) JB	1530	1 e
197) DN	1530	0.2 c
3) GC	°1530	0.35 c
198) LE	1530	1 f
199) ZF	1540	0.25 c
200) BV	1540	1 h
201) ZI	1550	1 n
202) GY	1550	1 n
203) ZX	1560	0.25 c
204) CP	1560	1 c
1) GP	°1560	1 b
205) HE	1570	1 n
206) FW	1570	1 q
207) AY	1580	1 h
208) AP	1580	1 n
209) LC	1580	1 n
210) LP	1590	1 n
211) ZT	1600	1 n

a) **INSTITUTO NACIONAL DE RADIO Y TV** (R. Nacional – Go.) – **Addr:** Apt. Nac. 1824, Bogota. **Te:** 435640 – **L.P:** Dir. Gen: C. Simmonds P, Dir. Tec: W. Puth – **D.prgr:** 12.00 (Sun 14.00)–05.00.

b) **ACCION CULTURAL POPULAR:** (Educational)

c) Cultural or non-comm. private st's.

d) **CARACOL-PRIMERA CADENA RADIAL COLOMBIANA** – **Addr:** Apt. Aéreo 9291, Nac. 4923, Bogota. **Cable:** "Caracol" – **L.P:** Pres: F. Londoño H. Comm. Mgr: J. Alvarez B – **D.prgr:** 11.00–05.00.

e) **RADIO CADENA NACIONAL (RCN)** – **Addr:** Apt. Aéreo 1244, Medellin. **Te:** 28642 – **L.P:** Pres: L. A. Villegas M. Dir. Tec: G. Escobar – **D.prgr:** 11.00–05.00.

f) **TODELAR** – **Addr:** Apt. Aéreo 4392, Cali. **Te:** 89386 – **L.P:** Dir. Gen: B. Tobon de la Roche.

g) **RADIO SISTEMA TRICOLOR DE COLOMBIA(RST)** – **Addr:** Apt. Aéreo 7766, Bogota – **L.P:** Mgr: J. Vanegas R.

hm) **CRANSONAR** – **Addr:** Ca. 13, No. 875, Bogota. **Te:** 415072 or Apt. Aéreo 3163, Medellin. **Te:** 459628 – **L.P:** Dir. Gen: J. Tobón de la Roche.

i) **UNION RADIO** – **Addr:** Apt. Aéreo 13018, Bogota. **Te:** 432925 – **L.P:** Mgr: J. Fernandez G.

j) **CADENON** (R. Cadena del Norte) – **Addr:** Apt. Aéreo 9164, Bogota. **Te:** 346077 – **L.P:** Mgr: A. Martinez (Apt. Aéreo 246, Cartagena).

k) **CIRCUITO RADIAL ABC S.A.** – **Addr:** Apt. Aéreo 1771, Nac. 206, Cartagena. **Cable:** Radial – **L.P:** Mgr: R. Fuentes L. Dir. Tec: C. Estevez L. – **Prgr:** 10.45–05.00 **N:** 12.10, 17.00, 00.00 – **V.** by letter.

l) **CORAL-CORPORACION RADIAL COLOMBIANA** – **Addr:** Ca. 12, No. 517, Bogota.

q) **ORGANIZACION INDEPENDIENTE DE LA RADIOFONIA COLOMBIANA (OIR)** – **Addr:** Bogota.

y) **ANRADIO-ASOCIACION NACIONAL DE RADIODIFUSION** – **Addr:** Av. Jiménez 1128, Oficina 503, Bogota. **Te:** 423413 – **L.P:** Pres: A. Naranjo V.

z) **FEDERADIO – FEDERACION COLOMBIANA DE RADIODIFUSION** – **Addr:** Cra 7, No. 1764, Oficina 1004, Bogota – **L.P:** Pres: H. Tellez B.

Short Waves: Abbrev: Cra = Carrera, Ca = Calle. .

1) Escuelas Radiofonicas, Apt. Aéreo 1770, Nac. 3262, Bogota. **Cable:** Radiofonicas. **Te:** 420543 – **L.P:** Dir. Gen: J.J. Salcedo G. Mgr: F. Sarmiento O. Dir. Tec: P. Sanchez C. Dir. Prgr: F. Gutiérrez R – **D.Prgr: On 5075/1560kc:** 10.20–03.10 (Escuelas Radiofonicas: 11.00–12.00, 20.00–21.00, 22.00–23.00, 00.00–01.00. **N:** 12.00, 22.20, 01.00, 03.00) – **On 5095kc:** 10.20–14.00 & 19.00–03.10; **On 6075kc:** 10.20–03.10 (Escuelas Radiofonicas **N:** as for 5075/1560kc) – **On 590kc** (Medellin): 10.30–05.00 – **On 810kc** (Bogota): 11.30–04.00 (Escuelas Radiofonicas: 13.00–14.00, 20.00–21.00. **N:** 12.00, 20.00, 23.30, 03.00) **On 1150kc** (Belencito): 10.45–03.10 (Escuelas Radiofonicas: 11.00–12.00, 20.00–21.00. **N:** 12.00, 23.20, 03.00) – **Ann:** "R. Sutatenza afiliada a la Confederación Latinoamericana para la Educación Fundamental Integral, transmite desde Sutatenza, en Boyacá Republica de Colombia" – **V.** by QSL-card.

2) **V.** by QSL-card or letter – **Locations** 550kc Medellin, 570kc Bogota, 580kc Cali, 960kc Manizales, 1000kc Barranquilla.

3) Chiquinquira – 4) Bogota – 5) Armenia.

6) Cra. 43 No. 4796, Medellin – 7) Apt. Aéreo 390, Pasto. **Cable:** "Radionarino". **Te:** 1854 – 8) Ca. 5, Cra 2, Buenaventura –

9) Apt. Aereo 572, Apt. Nac. 47, Bucaramanga. **Te:** 5406. **Telex:** 48386 **L.P:** Dir. Gen: P. Sorzano B. Dir. Tec: G. Sorzano J – **D.Prgr: N:** 12.00, 17.00, 24.00 – **English:** W 03.30–04.00 – **Ann:** "Estas son las Emisoras de R. Bucaramanga, transmitiendo en sus freq's HJGF onda corta 4845kc, HJGE onda larga 1030kc, y HKSO frequencia modulada 96.5Mc desde Bucaramanga capital del Departamento de Santander en la República de Colombia" **E:** "This is R. Bucaramanga transmitting over following freq's...from Bucaramanga, Colombia in So. America" – **V.** by QSL-card. **Re.** in Sp, E.

10) Cra 7No. 569, Neiva – **V.** by QSL-card – 11) Cucuta –

12) Cra 7 No. 1135, piso 6, Bogota. **Te:** 421105 – **L.P:** Mgr: A. Gaitan

13) Apt. Aéreo 174, Barranquilla – **L.P:** Mgr: M.A. Blanco – **V.** by QSL-card.

14) Apt. Aéreo 9339, Bogota. **Te:** 411482 – **V.** by letter – 15) Tunja

16) Apt. Aéreo 244, Manizales. **Te:** 5549 – **L.P:** Mgr: I. Escobar U. Dir. Tec: E. Martinez. Dir. Prgr: E. Bermudes R – **D.Prgr: N:** 12.00, 17.00, 24.00 – **Ann:** "Transmisora Manizales Colombia Filial de R. Cadena Nacional" – **V.** by letter. Records accepted.

17) Florencia – 18) Apt. Aéreo 1972, Cali. **Te:** 81350. **Cable:** "Radiosol" – **L.P:** Dir. Gen: B. Tobón de la Roche. Dir. Tec: L. Carlos E. Dir. Prgr: F. Franco G – **Ann:** "Esta es R. El Sol, 980kc, canal preferencial, onda corta 5040kc, banda internacional de 59 mts; del Circuito Todelar de Colombia, R. El Sol de Cali, en dos frequencias para cubrir toda la república" – **V.** by letter.

19) Cra 5 No. 1876, Bogota. **Te:** 432925 – **L.P:** Mgr: G. Uribe Th – **V.** by letter – 20) Av. Jiménez 540, Bogota. **Te:** 439813.

21) Apt. Aéreo 1431, Medellin – **L.P:** Dir. Gen: B. Tobón de la Roche. Dir. Tec: J. Tobón de la Roche – **Ann:** "Desde el R. Centro Todelar y sus Circuito Nacional de Emisoras transmite La Voz del Rio Grande HJDO 910kc onda larga, en Medellin, Colombia" – **V.** by letter. Records accepted – **F.PL:** sw 10kW, mw 25kW.

22) Apt. 244, Pereira – **L.P:** Mgr: J. Mejia D – **V.** by letter.

23) Apt. Aéreo 89, Pereira – **V.** by letter – 24) Apt. Aéreo 604, Ibague – **V.** by QSL-card or letter – 25) Apt. Aéreo 2180, Cali – **V.** by letter.

26) Apt. Aéreo 375, Pasto – **L.P:** Mgr: A.J. Meneses – 27) Villavicencio.

28) Apt. Aéreo 3163, Medellin. **Te:** 459628 – **L.P:** J. Tobón de la Roche. Dir. Tec: E. Arango – **Ann:** "Sabe Quien transmite? R. Visión de Medellin una emisora de Sonar, Soc. Nacional de Radiofusión, trabajando para Vd." – **V.** by letter. Rp. Records accepted.

29) Apt. Aéreo 8467, Nac. 2167, Bogota. **Te:** 415036 – **L.P:** Mgr: J. Tobón de la Roche. Dir. Tec: J. Rios – **V.** by letter. Records accepted – **F.Pl:** 50kW mw – 30) Apt. Aéreo 535, Popayan – **L.P:** Mgr: O. Burchardt – **V.** by letter.

31) Cra 15 No. 13–47, Bogota. **Te:** 344805. **Cable:** "Nuevagranada" – **L.P:** Dir. Gen: L. Betancourt Tolosa – **D.Prgr: N:** 12.00, 17.30, 23.30, 02.30, 04.45 – **Ann:** "Transmite Nueva Granada" estaciones HJKL y HJKJ 610kc onda larga y 6160kc onda corta, desde Bogota, Republica de Colombia" – **V.** by QSLcard. **Re.** in Sp, E Records accepted. – **F.PL.** 50kw on 610kc – 32) Apt. Aéreo 4392, Cali. **Te:** 89386 – **L.P:** Dir. Gen: B. Tobón de la Roche – **V.** by letter.

Medium Waves:

33) **R. Libertad,** Barranquilla – 34) **R. Tricolor,** Cali. **Te:** 63811. **L.P:** Mgr: J. A. Vanegas. 24 h – 35) **R. Manizales,** Apt. Aéreo 67, Manizales. **Te:** 1395. **L.P:** Mgr: A. Hoyos A.V. by letter – 36) **La Voz de Santa Marta,** Santa Marta. **L.P:** Mgr: J. A. Sanchez – 37) **R. Tricolor,** Bello, Medellin. 24 h – 38) **R. Miramar,** Apt. Aéreo 246, Cartagena – 39) **La Voz de Colombia,** Cra 9 No. 1223, piso 3, Bogota. **Te:** 422344. **L.P:** Mgr: J. Munera L – 40) **Ecos del Combeima,** Ibague – 41) **Emisoras Unidas,** Apt. Aéreo 154, Nac. 324 Barranquilla. **Te:** 16490. **Cable:** "Emisunidas". 10.00–05.00 – 42) **R. Tricolor,** Apt. Aéreo 7766, Bogota. **Te:** 457073. **L.P:** Mgr: J. Vanegas R. 24 h – 43) **La Voz de Antioquia,** Maracaibo 4680, Medellin. **Te:** 421660. **L.P:** Mgr: H. Restrepo – 44) **La Voz de Barranquilla,** Barranquilla – 45) **Emisora Monserrate,** Cra 8 No. 1733 piso 3, Bogota – 46) **R. El Pais,** Cali – 47) **Ecos de la Montaña,** Cra 53 No. 5242, Medellin – 48) **Emis. Atalaya,** Bucaramanga – 49) **La Voz del Rio Cauca,** Cra. 1 No. 1839, Cali. **Te:** 72740 – 50) **Ondas del Caribe,** Santa Marta – 51) **Emis. Nuevo Mundo,** Apt. Aéreo 9291, Bogota. **Te:** 436800 – 52) **Voces de Occidente,** Cra. 14 No. 231, Buga. **L.P:** Mgr: R. Azcarate – 53) **La Voz de los Comuneros,** Bucaramanga – 54) **R. Abacoa, S.** Andres Isla – 55) **Emis. Fuentes,** Apt. Aéreo 1771, Nac. 206, Cartagena. **Cable:** "Emifuentes". **Te:** 13004, 10.00–05.00 –

56) **R. Eco,** Apt. Aéreo 4535, Cali – 57) **La Voz del Café,** Cra 1465, Pereira. **Te:** 6898 – 58) **La Voz de Medellin,** Apt. Aéreo 1244, Medellin. **Te:** 28642 – 59) **Emis. Mil Veinte,** Cra 13 No. 875, piso 2, Bogota. **Te:** 424336. **L.P:** Mgr: F. Gomez A – 60) **Emis. Claridad,** Apt. Aéreo 2094, Medellin – 61) **R. Kalamary,** Cra. 39 No. 4145, Barranquilla. **L.P:** Mgr: E. Ariza – 62) **R. Melodia,** Apt. Aéreo 7766, Bogota. **Te:** 457073. 12.00–05.00.

63) **La Voz del Triunfo,** Cra 51, No. 5131, Medellin. **L.P:** L.E. Ramirez –64) **R. Palmira,** Palmira. **L.P:** Mgr: O. Burckhardt – 65) **R. Reloj,** Cra 53, No. 4680, Medellin – 66) **R. Musical,** Apt. Aéreo 1972, Cali – 67) **La Voz de Armenia,** Apt. Aéreo 617, Armenia – 68) **La Voz de Cucuta,** Av. 5 No. 842 piso 6, Cucuta. **Te:** 2035 – 69) **R. Reloj,** Cra 42 No. 2346, Barranquilla – 70) **R. Reloj,** Cra 19 No. 848, Bogota. **Te:** 428369 – 71) **Pontif. Bolivariana,** Apt. Aéreo 1178, Medellin – 72) **R. Reloj,** Cra 1 No. 1839, Cali – 73) **R. Tunja,** Tunja – 74) **Ondas del Valle,** Cra 5 No. 1223 piso 3, Cartago – 75) **Emis. Riomar,** Cra 32 No. 4219, Barranquilla – 76) **Emis. Sur America,** Apt. Aéreo 7766, Bogota. 10.00–05.00 – 77) **R. Cartago,** Cra 4 No. 1062, Cartago – 78) **R. Girardot,** Cra 8 No. 1019 piso 3, Girardot – 79) **R. Cristal,** Medellin 80) **La Voz del Valle,** Cali – 81) **Pregones del Quindio,** Edif. Banco Cafetero, piso 5, Armenia. **Te:** 1200 – 82) **El Mundo en Bogota,** Cra 7 No. 1714, Bogota. **Te:** 429022. **L.P:** Mgr: A. Castaño C – 83) **Ondas del Rio,** Magangue – 84) **La Voz del Sinu,** Apt. Aéreo 148, Monteria. **Te:** 8219. **Cable:** "Emisinu". 10.00–05.00 – 85) **Emos. Villa Cespedes,** Tulua – 86) **R. Nutibara,** Edif. A. Angel, Medellin. **Te:** 14675. **L.P:** Mgr: J. Garcia Lobo – 86a) **R. Colosal,** Neiva – 87) **R. Santander,** Apt. Aéreo 1100, Bucaramanga. **L.P:** Mgr: Fco. Bueno – 88) **La Voz del Ruiz,** Cra 22 No. 2337, Manizales. **Te:** 2423 – 89) **R. Cordillera,** Cra 9 No. 1333 piso 3, Bogota. **Te:** 341743 – 90) **La Voz de la Costa,** Barranquilla – 91) **R. Sindamanoy,** Pasto – 92) **La Sultana del Valle,** Cali – 93) **R. Nueva Epoca,** Fusagasuga – 94) **R. Colibri,** Itagui, Medellin – 95) **R. Internacional,** Cucuta – 96) **Emis. Cultural Bolivar,** Ipiales – 97) **R. Cordobesa,** Monteria – 98) **R. Juventud,** Ca. 12 No. 517, Bogota. **Te:** 422254. **L.P:** Dir: A. Monroy G. – 99) **La Voz del Litoral,** Ca. 72 No. 4363, Barranquilla. **Te:** 41844 – 100) **R. Calidad,** Cali – 101) **La Voz de las Americas,** Cra 51, No. 5140, Medellin – 102) **R. Barrancabermeja,** Barrancabermeja – 103) **R. Bandera,** Girar-

dot – 104) **R. Modelo,** Cra 13 No. 1281, oficina 201, Bogota. Te: 436478 – 105) **R. Vigia,** Apt. Aéreo 154, Nac. 324, Barranquilla. Te: 15261. 24 h – 106) **Emis. Mariana,** Pasto – 107) **R. Tiempo,** Apt. Aéreo 944, Cucuta. Te: 4296.
108) **R. Bolivar,** Av. 8 No. 10110, Cali – 109) **Ondas del Nevado,** Ibague. Te: 34830 – 110) **R. Duitama,** Duitama – 111) **Emis. Siglo XX,** Cra 51 No. 5963, Medellin – 112) **R. Morgan,** S. Andres Isla – 113) **Onda Libre,** Pereira – 114) **R. Compas,** Giron – 115) **La Voz de Cienaga,** Cienaga – 116) **R. Pasto,** Pasto – 117) **R. Metropolitana,** Apt. Aéreo 7766, Bogota. Te: 457073. 24 h – 118) **La Voz de Cartagena,** Apt. Aéreo 246, Cartagena. 119) **R. Libertador,** Cra 3 No. 1580, Cali. L.P: Mgr: R. Angulo – 120) **R. Ritmos,** Medellin – 121) **R. Villavicencio,** Villavicencio. Te: 2238. V. by letter. Reported using 4875kc – 122) **Ondas del Puerto,** Cra 14 No. 1119, Girardot – 123 **R. Sur,** Pitalito – 124) **R. Valledupar,** Valledupar – 125) **Transmisora Guia,** Bucaramanga – 126) **R. S. Eugenio,** Cra 15 No. 1532, S. Rosa de Cabal – 127) **La Voz de la Patria,** Apt. Aéreo 231, Nac. 621, Barranquilla. L.P: Dir: C. Vassallo – 128) **R. Quince,** Ca. 13 No. 875, Bogota. Te: 424336 – 129) **R. Catatumbo,** Apt. Aéreo 19, Ocaña – 130) **La Voz dela Amistad,** Pasto – 131) **La Voz de la Independencia,** Envigado, Medellin – 132) **R. Luna,** Palmira – 133) **Ondas del Huila,** Banco Comercio, Neiva – 134) **R. Morrosquillo,** Sinceleco – 135) **La Voz de Pereira,** Car 18 No. 854, Pereira – 136) **Ondas del Fonce,** San Gil – 137) **La Voz de la Sabana,** Cra 42 No. 1394 piso 3, Bogota. Te: 470293 – 138) **R. Vigia,** Apt. Aéreo 1771, Nac. 206, Cartagena. Te: 13398. Cable: Vigia. 24 h – 139) **R. Sideral,** Apt. Aéreo 2146, Cali – 140) **La Voz de Chaparral,** Chaparral – 141) **La Voz de la Candelaria,** Medellin. Te: 425445, 10.00–05.00 – 142) **Ecos del Rio,** Puerto Boyaca – 143) **La Voz de Anserma,** Anserma – 144) **Emis. Jose Galan,** Socorro – 145) **R. Sabanas,** Sincelejo – 146) **R. Mundial,** Cra 7 No. 1135 piso 5, Bogota. Te: 418295 – 147) **R. Piloto,** Barranquilla – 148) **R. Guaimaral,** Cucuta – 149) **R. S. Barbara,** Santa Barbara – 150) **La Voz de la Dorada,** Cra 3, No. 1125, La Dorada. Te: 7171 – 151) **Armonias del Palmar,** Cra. 29 No. 3290, Palmira. Te: 3344 – 152) **Armonias del Sur,** Neiva – 153) **La Voz de Cerete,** Cerete – 154) **R. Luz,** Apt. Aéreo 284, Manizales – 155) **R. Pipaton,** Barrancabermeja – 156) **Emis. Mariana,** Cra 7 No. 610, Bogota. Te: 462712 – 157) **Emis. Variedades,** Cra 35 No. 35106, Barranquilla – 158) **R. Las Lajas,** Ipiales – 159) **La Voz de la Gran Colombia,** Villa Rosario, Cucuta – 160) **Emis. Guadalajara,** Cra 5 No. 853, Buga – 161) **R. Magdalena,** Apt. Aéreo 706, Santa Marta. Te: 330 – 162) **Ondas del Guali,** Honda. Te: 1256 – 163) **La Voz de Calarca,** Calarca – 164) **R. del Comercio,** Cra 36 No. 2150, Bucaramanga. Te: 72641 – 165) **R. Bahia,** Cartagena – 166) **La Voz de Belalcazar,** Cra 5 No. 581, Popayan – 167) **R. Pamplona,** Pamplona – 168) **Ondas de Ibaque,** Edif. Raad, Ibague. L.P: Mgr: L. E. Martinez R – 169) **Ondas de Riohacha,** Riohacha – 170) **R. Sinfonia,** Itagui, Medellin – 171) **R. Tulua,** Cra 26 y 27, Tulua – 172) **R. Sogamoso,** Sogamoso – 173) **R. Sintonia,** Villamaria CDS – 174) **R. Sincelejo,** Sincelejo – 175) **R. Alegria,** Cra 5 No. 1465, Bogota. Te: 342225 – 176) **La Voz de Pamplona,** Pamplona – 177) **La Voz del Espinal,** Espinal – 178) **La Voz del Paraiso,** Cerrito V – 179) **R. Armonia,** Medellin – 180) **Ondas de la Cienaga Grande,** Cienaga – 181) **R. Centinela,** Cra 8, Edif. Algira, Pereira – 182) **La Voz de Monteria,** Monteria – 183) **Antena en Colores,** Bogota – 184) **R. Guatapuri,** Valledupar – 185) **R. Garzon,** Garzon – 186) **R. Calima,** Darien – 187) **R. Boyaca,** Apt. Nacional 96, Tunja. Te: 3832 – 188) **R. Sumapaz,** Cra 7 No. 535, Fusagasuga. Te: 2000 – 189) **La Voz Katia,** Envigado Medellin – 190) **La Voz Panamericana,** Floridablanca S – 191) **R. Estrella,** Armenia – 192) **R. Minuto,** Barranquilla – 193) **La Voz de Lorica,** Lorica – 194) **La Voz de Chapinero,** Bogota – 195) **R. Popayan,** Cra 12 No. 427, Popayan. Te: 2738 – 196) **R. Sevilla,** Cra 50, Ca. 49 y 50, Sevilla – 197) **Liceo Departamental,** Sonson – 198) **R. Armero,** Armero – 199) **Emis. Mariana,** Manizales – 200) **R. Canoa,** Turbaco – 201) **R. Fantasia,** Ca 12 No. 517, Bogota. Te: 429435 – 202) **R. Magangue,** Magangue – 203) **R. Copacabana,** Copacabana – 204) **R. Parroquial,** Nemocon – 205) **Brisas del Magdalena,** Barrancabermeja – 206) **R. Sensación,** Manizales – 207) **Voz de la Cordialidad,** Galapa, Barranquilja – 208) **Emis. Femenina,** Cra 7 No. 1137, Bogota. Te: 432523 – 209) **La Voz del Banco,** El Banco – 210) **Armonias Norte Vallecaucanas,** Caicedonia – 211) **R. Ciudad Milagro,** Armenia.

ECUADOR

L.T: GMT–5 h – **Pr.L:** Spanish, Quechua.

INSPECCION DE RADIO, Ministerio de Publicas, Direccion Tecnica – **ADDR:** Benalcazar 698, Quito. **Cable:** Radionacional. **Te:** 11019 – **L.P:** Dir: A. Zabala.

ASOCIACION ECUATORIANA DE RADIODIFUSORAS **ADDR:** Apt. 289, Quito. **Cable:** AER. **Te:** 10669 – **L.P:** Pres: G. Vergara Jimenez.

STATIONS: **Short Waves:** Call: HC---. *) inactive

	Call	kc	m	kW	Name and h of tr.
1)	RO1	2485	120.7	0.2	R. Otavalo: 12.00–18.00, 23.00–03.00
2)	LP3	3215	93.30	0.25	La Voz de el Oro, Pasaje: 12.00–14.00, 20.00–23.00, 00.00–05.00
3)	JC1	3240	92.59	0.2	R. Atuntaqui: 16.00–03.30
4)	LM3	3245	92.45	0.2	La Voz de Pasaje: 12.00–13.00, 20.00–23.00, 01.00–04.00
5)	MZ6	3265	91.87	0.2	Voz del Rio Chimbo: 11.00–05.00
6)	AH3	3270	91.75	0.3	R. El Trebol, Zaruma: 10.00–03.00
7)	VU2	3275	91.60	0.2	La Voz de Urdaneta, Ricaurte: 10.00–07.00
8)	DR4	3355	89.42	0.2	R. Miramar, Bahia: 23.00–03.00
9)	4HE	3390	88.50		La Voz de Esmeraldas: 10.00–13.00 16.00–20.00, 23.00–06.00
10)	SG4	3505	85.59	1	La Voz del Valle, Portoviejo: 11.00–13.00, 15.00–04.00
11)	NL2	3510	85.47	0.2	La Voz del Campesino, Naranjal
12)	KD5	3515	85.35	0.2	R. Centro de Gualaceo: 23.00–03.00
13)	YC4	3520	85.23	0.2	R. Escuelas Radiales, Lita: 23.00–03.00
14)	OT1	3545	84.63	0.2	R. Zaracay, Sto. Domingo Cds: 11.00–14.00, 23.00–05.00
15)	HG2	3570	81.24	0.35	R. Central, Vinces: 23.00–05.00
16)	HA2	3610	83.13	0.25	Ondas Quevedañas, Quevedo: 23.00–03.00
17)	GS6	3615	86.00	0.4	R. Pillaro: 10.00–13.00, 22.00–03.00
18)	OS4	3630	82.64	0.25	La Voz del Carrizal, Calceta: 11.30–04.00
19)	MR1	3640	82.41	0.5	R. Cayambe: 11.00–13.00, 23.00–04.00
20)	JT1	3680	81.48	0.3	R. Tulcan: 12.00–17.00, 22.00–05.00
21)	IE1	3695	80.95	0.5	R. Cotacachi: 23.00–03.00
22)	GB4	3720	80.65	0.35	R. Nac. Espejo, Esmeraldas: 23.00–03.00
23)	HW2	3725	80.54	0.2	R. Rey, Quevedo: 15.00–19.00, 21.00–04.00
24)	JR6	3745	79.65	0.2	La Voz del Colegio Mera, Ambato: 17.30–19.30, 00.00–02.00
25)	BH6	3755	79.90	0.4	R. Latacunga: 15.00–19.30, 20.30–04.00
26)	WN1	3835	78.20	0.35	La Voz del Triunfo, Sto. Domingo Cds: 23.00–03.00
27)	DY4	3945	76.05	0.25	R. Iris, Esmeraldas: 11.00–14.00, 22.00–06.00
28)	PZ1	3950	79.95	0.3	R. Rumichaca, Tulcan: 11.30–15.15, 16.45–04.00
29)	JH1	3965	75.67	0.3	R. Turismo, Otavalo: 23.00–03.00
30)	SN6	3975	75.47	0.6	R. Sira, Ambato: 12.00–23.15, 01.00–04.30
31)	OF4	3980	75.38	0.4	La Voz de Chone: 11.30–05.00
32)	ER5	3985	75.28	1	Escuelas Radiofonicas Populares, Riobamba: 10.00–13.00, 16.00–19.00, 20.00–03.00
33)	JA5	3990	75.19	0.5	La Voz del Rio Tarqui, Cuenca: 11.00–04.00
34)	AO5	*4000	75.00	0.3	La Voz de Tomebamba, Cuenca
35)	BK2	4750	63.96	0.25	R. El Mundo, Guayaquil: 13.00–19.30, 21.45–04.00
36)	LJ6	4755	63.10	0.2	La Voz de Bolivar, Guaranda: 00.00–03.30
37)	2AK	4765	62.95	2	R.Dif. del Ecuador, Guayaquil: 10.45–05.00
38)	MX4	4770	62.89	0.4	R. Cenit, Portoviejo: 11.00–13.00, 15.00–04.00
39)	EH3	4775	62.84	0.2	R. El Progreso, Loja: 11.00–15.00, 17.00–20.00, 24.00–03.00
40)	LC1	4780	62.76	1	R. Atahualpa, Quito: 10.45 04.35
41)	AU2	4790	62.63	0.25	R. Reloj, Guayaquil: 11.00–05.00
42)	SV5	4800	62.50	0.25	R. Amazonas, Cuenca: 11.00–20.00, 23.00–04.00
43)	LS3	4810	62.37	0.2	R. Coro Santa Cecilia, Loja: 23.00–03.00
44)	FA4	4815	62.31	0.3	La Voz de Manabi, Portoviejo: 10.30–04.00
45)	JS1	4830	62.10	0.5	Ondas del Angel, El Angel: 15.00–19.00, 21.30–03.30
46)	AP4	4835	62.05		La Voz del Valle, Portoviejo: 11.00–13.00, 15.00–04.00
47)	RM3	4845	61.92	0.38	R. Cultural Machala: 11.00–19.00, 00.00–05.00
48)	CV3	4850	61.86	0.25	Ondas del Zamora, Loja: 23.00–03.00
49)	MA1	4855	61.79	0.35	R. Amazonas, Quito
50)	JC3	4860	61.73	0.25	R. 18 de Noviembre, Loja: 23.00–03.00
51)	CD1	4865	61.66	1	R. Luz de America, Quito: 11.00–14.30, 17.00–20.00, 22.00–04.00
52)	GM7	4870	61.60	0.3	R. Rio Amazonas, Macuma: 23.00–03.00
53)	WE1	4880	61.48		R. Nac. Espejo, Quito: 24 h.
54)	VS6	4904	61.18	0.42	La Voz de Saquisili: 23.00–03.00
55)	MJ1	4910	61.10	0.3	Emis. Gran Colombia, Quito: 11.00–06.00

	Call	kc	m	kW	Name and h of tr.
56)	MP2	4920	60.98	0.2	La Voz de la Peninsula, La Libertad: 23.00–03.00
57)	JX6	4920	60.98	0.35	R. Cultural Religiosa, Baños: 23.00–03.00
58)	QR1	4923	60.94	3	R. Quito: 24 h.
59)	CR1	4930	60.85	10	R. Casa de la Cultura, Quito: 11.30–13.00, 17.00–19.00, 00.00–03.15
60)	XZ1	4940	60.73	10	R. Nacional del Ecuador, Quito: 11.00–14.30, 16.30–19.30, 22.30–05.00
61)	AV3	4950	60.60	0.25	R. Ondas Lojanas: 11.00–14.00, 17.00–20.00, 00.00–03.00
62)	PH5	4960	60.48	1	R. Ruta, Riobamba: 23.00–03.00
63)	GH1	4970	60.35	0.25	R. Tarqui: 10.45–04.00
64)	JC5	4980	60.24	0.3	Ondas Azuayas, Cuenca: 10.45–05.00
65)	SJ1	4990	60.12	1	R. Javier, Quito: 11.00–16.00, 16.45–17.30, 22.00–03.00
66)	AS4	5010	59.88	0.4	La Voz de los Caras, Bahia: 23.00–05.00
67)	RP1	5015	59.82	0.5	R. Católica, Quito: 10.35–15.00, 17.00–18.00, 22.00–03.00
68)	OB5	5025	59.70	0.2	Ondas Azules, Cuenca: 11.30–04.00
69)	PS5	5030	59.64	0.5	Ondas Cañaris, Azogues: 11.00–14.00, 15.45–19.00, 21.45–04.00
70)	CU5	5035	59.58		La Voz de Azogues
71)	VC3	5035	59.58	0.75	R. Centinela del Sur, Loja: 23.00–03.00
72)	EA5	5045	59.46	0.25	R. Roxi, Riobamba: 23.00–03.00
73)	RI1	5055	59.36	0.22	Centro Radiofonico de Imbabura, Ibarra: 23.00–03.00
74)	CV5	5950	50.42	0.3	La Voz de los Cuatro Rios, Cuenca: 11.00–05.00
75)	DF1	5955	50.38	0.6	La Voz del Norte, Ibarra: 23.00–03.00
76)	TR1	5960	50.34	0.75	R. Equinoccial, Ibarra: 23.00–03.00
77)	GE5	5965	50.29	0.2	R. Mundial, Riobamba: 23.00–03.00
78)	MH6	5970	50.25	0.5	Org. Radiofonica del Cotopaxi, Latacunga: 12.00–15.00, 16.00–20.00, 22.00–04.30
79)	EB4	6015	49.88	0.5	R. Manta: 11.30–14.00, 16.00–19.00, 23.00–04.00
80)	NK3	6035	49.71	0.5	R. Cariamanga: 23.00–03.00
81)	JB	6050	49.50	30	La Voz de los Andes, Quito
82)	AC1	6060	49.50	0.75	La Voz de la Democracia, Quito: 11.30–04.30
83)	EM1	6065	49.46	0.2	Ondas Carchenses, Tulcan: 12.00–14.00, 17.00–19.00, 20.00–03.00
84)	IW5	6070	49.42	0.5	R. El Mercurio, Cuenca: 23.00–03.00
85)	DG2	6080	49.34		R. Bolivar, Guayaquil: 12.00–05.00
86)	VM6	6090	49.26	0.5	R. Once de Noviembre, Latacunga: 12.00–20.50, 22.00–04.00
87)	PT5	6095	49.22	0.3	La Voz del Perpetuo Socorro, Cuenca: 23.00–03.00
88)	SP4	6100	49.18	1	La Voz del Volante, Portoviejo: 10.30–13.00, 15.00–04.00
89)	RL2	6120	49.02		R. Quinta Piedad, Guayaquil: 11.00–04.00
90)	FB2	6130	48.94	1.5	R. Nacional Condor, Guayaquil: 09.00–06.00
91)	OV5	6140	48.86	1	Ondas del Volante, Azogues: 23.00–03.00
92)	EM4	6150	48.78	0.3	R. Costa Azul, Portoviejo: 23.00–03.00
93)	PJ2	6170	48.62	0.25	R. Fluminense, Ricaurte: 23.00–03.00
94)	RT6	6180	48.54	0.45	R. Paz y Bien, Ambato: 11.00–15.00, 17.00–19.00, 22.00–02.00
95)	EH6	6195	48.43	1.5	R. Cosmopolita, Ambato: 12.00–03.30
81)	JB	9745	30.78	1/30	La Voz de los Andes, Quito
81)	JB	11755	25.52	30	La Voz de los Andes, Quito
81)	JB	11915	25.18	30	La Voz de los Andes, Quito
81)	JB	15115	19.85	1/30	La Voz de los Andes, Quito
81)	JB	17860	16.80	30	La Voz de los Andes. Quito
81)	JB	17890	16.77	30	La Voz de los Andes, Quito

Medium Wave: Call: HC--. °=Short Wave.

	Call	kc	kW		Call	kc	kW		Call	kc	kW
96)	RM2	560	1	106)	FA2	725		51)	CD1	°835	1
97)	BX2	588	0.2	107)	IC1	730	0.4	117)	ET6	845	0.8
98)	SP1	595	0.2	108)	SE4	735	0.25	118)	AJ2	850	0.2
99)	PC2	610	0.5	109)	CT2	750		119)	VN4	855	0.25
100)	RF3	625	0.3	81)	JB	°760	0.5	120)	DG1	860	1
101)	CS2	630	0.35	110)	MF2	770	1	121)	OA7	865	0.4
60)	XY1	°640	10	111)	RG4	780	0.3	122)	NY2	870	1
102)	FM2	665	0.45	112)	AA1	785	0.2	67)	RP1	°880	0.5
65)	SJ1	°670	1	85)	DE2	°800	10	123)	LG3	885	0.2
103)	PV2	675		113)	FV1	805	0.5	124)	TL5	890	0.5
104)	WC1	680	0.2	114)	VT2	810	0.2	125)	GC2	895	0.3
105)	RS2	693	0.3	61)	AV3	°815	0.25	126)	RJ1	900	1.2
81)	JB1	°700	30	115)	AI6	820	0.3	68)	EV5	°900	0.2
46)	AM4	°715	1	116)	GB2	825	2	77)	GR5	°910	0.2
127)	RU3	914	0.2	158)	LA2	1115	0.2	182)	FR2	1320	0.2
128)	CM1	920	0.5	52)	GM7	°1120	0.3	183)	PX1	1335	0.3
129)	VL2	925	0.3	34)	AO5	°1120	0.25	41)	AU2	°1350	0.25
130)	IM1	930	0.3	159)	GY6	1125	0.5	94)	PB6	°1335	0.25
131)	UE5	935		160)	AP5	1130	0.35	58)	RQ1	°1360	0.5
132)	MT1	940	0.5	90)	FB2	°1140	0.25	184)	HA2	1370	0.25
133)	DE2	945	0.2	161)	RG1	1145	1.2	185)	PV6	1380	0.3
134)	JM1	950	0.5	162)	CZ5	1150	0.3	186)	JN1	1385	0.3
135)	MC2	955	0.2	163)	UE6	1165	0.5	74)	CV5	°1390	0.3
136)	NC1	960	0.4	164)	VJ5	1170	0.25	5)	VE4	°1395	
14)	OT1	°965	0.2	165)	AP5	1175	0.35	187)	FL2	1400	0.25
137)	MB1	970	0.35	166)	LR1	1180	0.4	188)	BS4	1400	0.2
138)	AW2	973	0.2	167)	BE2	1190	0.3	55)	MJ1	°1410	0.3
139)	JI5	980	0.3	168)	CS1	1195		189)	CV6	1420	0.3
63)	GH1	°990	0.25	84)	IW5	°1200	0.5	190)	MB2	1425	0.3
140)	RM2	995	1	169)	RQ2	1205	0.3	59)	BX1	°1430	1
141)	EW2	995	0.4	170)	GU1	1210	0.2	191)	US1	1440	0.4
142)	RO6	1000	0.2	171)	SF5	1215	0.2	62)	SC5	°1445	1
143)	RV5	1005	1.5	35)	BJ2	°1220	0.25	192)	AQ2	1450	0.25
144)	RC4	1010	0.4	30)	JM6	°1225	0.6	193)	GM1	1460	0.25
145)	RS6	1015	0.72	172)	MV5	1235	0.2	194)	ET4	1465	0.2
146)	LV1	1020	0.25	24)	CM6	°1240	1	195)	FP1	1470	0.3
147)	TO5	1027	0.25	173)	LA5	1240	0.5	196)	EJ3	1475	0.22
148)	CW1	1040	0.3	174)	FA1	1245	0.35	40)	LC1	°1490	1
149)	BG1	1040	1.5	175)	RB2	1250	0.1	197)	WN5	1496	0.4
37)	AJ2	°1050	10	176)	BO6	1260	0.35	1)	RO1	°1500	0.2
150)	AC6	1060	0.3	64)	JE5	1265	0.25	198)	VP6	1505	0.2
151)	RV3	1065	1.5	177)	UM2	1270	0.25	199)	VR1	1520	0.3
152)	VP1	1070	0.5	178)	JC6	1275		69)	OC5	°1530	0.21
153)	GB6	1075	0.5	82)	AB1	°1280	0.35	78)	MH6	°1535	0.5
154)	FD2	1080	0.3	33)	JA5	°1290	0.5	200)	DJ1	1545	
155)	MG1	1090	0.35	179)	MS1	1295	0.3	95)	EJ6	°1550	0.5
72)	ED5	°1090	0.25	180)	DC2	1300	0.25	201)	TR3	1555	0.5
156)	RR6	1095	0.4	53)	GB1	°1310	0.4	202)	VA4	1560	0.21
157)	RR5	1100	1.5	181)	JD6	1320	0.25	49)	AP1	°1570	0.35

Short Waves:

1) Otavalo – **L.P:** Dir: C. Chicaiza – 2) Pasaje – **L.P:** Dir: L. Peralta Palacios – 3) Atuntaqui – **L.P:** Dir: J. Cadena.
4) Pasaje – 5) San Jose de Chimbro – **L.P:** Dir: M. Zanipatin.
6) Zaruma – 7) Ricaurte – **L.P:** Dir: C. Casal Mendoza – 8) Bahia.
9) P.O. Box 1660, Esmeraldas. Te: 1106 – **L.P:** Dir. Gen: H. A. Endara E. Dir. Tec: Ing. Horvath – **D.Prgr: N:** 23.30 – **Ann:** "La Voz de Esmeraldas, La Voz del Pueblo, una emisora para la gente moderna y de buen gusto como Vd" – **V.** by letter. Records accepted – **F.Pl:** R. Reloj 0.5kW (24/12).
10) Portoviejo – 11) Naranja! – 12) Gualeceo – 13) Campamento Lita.
14) Sto. Domingo de los Colorados.
15) Malecon Eloy Alfaro y Olmedo, Bahos Hotel, Vinces. **Cable:** Emicentral – **L.P:** Dir. Gen: S. Elizalde C. Dir. Tec: H. Guerrero G – **D.Prgr: N:** 01.00, 01.15 – **Ann:** "Esta es organización R.fonica de Emis. "Central" de Vinces, transmitiendo desde el Barrio Obrero, para todo el país" – **V.** by letter. Records accepted – **F.Pl:** 5kW.
16) Quevedo – 17) Salcedo – **L.P:** Dir: Gonzalo Salazar.
18) Calceta – **L.P:** Dir: R. Navarrete – 19) Cayambe – **L.P:** Dir: M. Rodriguez – 20) Tulcan – **L.P:** Dir: J. Betancourt – 21) Cotacachi.
22) Esmeraldas – **L.P:** Dir: G. Berborich – **Ann:** "R. Nacional Espejo, la primera y mas potente emisora del pais" – **V.** by QSL-card.
23) Quevedo – 24) Apt. 91, Ambato – 25) Latacunga – 26) Sto. Domingo de los Colorados – 27) Cas. 142, Esmeraldas – **L.P:** Dir: D. Alvarez T – 28) Tulcan – **L.P:** Dir: E. Cabezas – 29) Otavalo – **L.P:** Dir: J. Vivar – 30) Ambato – **L.P:** Dir: J. Mancero – 31) Chone – **L.P:** Dir: O. Castro – 32) Riobamba – **L.P:** Dir: R. Veloz.
33) Cuenca – **L.P:** Dir: M. Pullas C.
34) Cas. 269, Cuenca. Te: 2650 – **L.P:** Dir. & Owner: L.F.Tapia J **D. Prgr:** 11.45–04.00 **V.** by QSLcard – 35) 9 de Octubre 308, Guayaquil – **L.P:** G. Vergara J – 36) Guaranda – **L.P:** Dir: L. Alarcon.
37) P.O. Box 4144, Guayaquil. **Cable:** CRE – **L.P:** Dir. Gen: R. Guerreo V. Dir. Tec: J. Magen – **D.Prgr:** N. every h on the h – **Ann:** "Esta es la C.R.E. de Guayaquil, Ecuador, 1050kc onda larga, 4765kc onda corta" – **V.** by letter. Records accepted – **F.Pl:** TV.
38) Portoviejo – **L.P:** Dir: W. Delgado – 39) Loja – **L.P:** Dir: E. Herrera G
40) Apt. 3213, Quito. **Cable:** Rahualpa. **Te:** 12385 – **L.P:** Dir. Gen: G. Maldonado. Dir. Tec: L. Calderon – **D.Prgr:** m.w.: 10.45–04.35. **N:** 11.00, 18.00, 19.00, 23.00, 01.00, 04.00. **Int. N:** every half h from 11.00–04.30. – **Ann:** "Les habla R. Atahualpa, emisora matriz del Circuito HCMQ, transmite en 1490kc, canal perferencial y 4780kc, canal nacional, desde Quito, capital del Ecuador" – **V.** by letter.
41) Guayaquil – 42) Cuenca – 43) Asoc. Juventud Femenina, Loja – 44) Portoviejo – **L.P:** Dir: C. Chavez C – 45) El Angel – **L.P:** Dir: J. Salazar – 46) Portoviejo – 47) Machala – 48) 24 de Mayo, Loja.
49) Quito – 50) Loja – **L.P:** Dir: J.C. Luzuriaga. – 51) Apt. 3190, Quito. Te: 16717 – **L.P:** Dir: A. Davila. Dir. Tec: F. Castillo – **Ann:** "Aqui Emisoras Luz de America, Quito, Ecuador – **V.** by letter.

Ecuador

52) Macuma – 53) Quito – **Ann:** "R. Nacional Espejo la primera ymas potente emisora del pais" – **V.** by QSL-card.
54) Saquisili
55) Cas. 2246, Quito. **Cable:** Emigrancolombia. **Te:** 11670 – **L.P:** Dir. Gen: E. Cevallas. Dir. Tec: F. Simon – **D.Prgr:** m.w: 11.00–06.00. **N:** 11.00, 18.00, 03.00 – **Ann:** "Emisoras Gran Colombia-Matriz de RCNE – R. Cadena Nacional Ecuatoriana con 3 Emisoras propias en Quito y 20 Emisoras afiliadas en provincias" – **V.** by letter – 56) La Libertad – **L.P:** Dir: M. Pinargote – 57) Baños.
58) Apt. 57, Quito. **Te:** 10151 – **L.P:** Dir. Gen: C. Mantilla. Dir. Tec: A. Horvath – **D.Prgr: N:** 12.00, 13.15 and every h on the h from 17.00 – **Ann:** "R. Quito, La Voz de la Capital...1360 y 4923kc desde Quito, Ecuador" – **V.** by letter – **F.Pl:** Sw 3kW, mw 5kW.
59) Apt. 67, Quito. Te: 31123 – **L.P:** Pres: Dr. B. Carrion – **D.Prgr: N:** 11.45, 03.00 – **Ann:** "Esta es R. difusora de la Casa de la Cultura Ecuatoriana, que transmite desde sus estudios en la ciudad de Quito" – **V.** by letter. Re. in Sp – **Pub:** Prgr. sched. on request.
60) P.O. Box 1316, Quito – **L.P:** Pres & Dir. Gen: Dr. H. Donoso V. Dir. Tec: F. Ernesto M. Dir. Prgr: C. Carrion – **D.Prgr: N. in Spanish** 11.30; **N. in Quechua** 12.00; **N. in English** 04.50 – **Ann:** "En transmisión Radiodif. Nacional del Ecuador, Voz oficial del Estado Ecuatoriano 640kc onda nacional, 4940kc onda internacional, desde Quito, Ecuador, en la mitad del mundo" – **Int-Sig:** Gong – **V.** by letter and QSL-card. Records accepted – **F.Pl:** 50kW tr. in 1965, FM; st's at Guayaquil, Cuenca.
61) Loja – 62) Sindicato de Choferes, Riobamba – 63) Plaza del Teatro, Quito – **L.P:** Dir: G. Herdoiza – **V.** by letter – 64) Apt. 4980, Cuenca – **L.P:** Dir: A. Cardozo – **V.** by letter – 65) Quito – 66) Bahia.
67) Cuenca 937, Quito – **L.P:** Dir: Dr. M.A. Rojas – 68) Cuenca – **L.P:** Dir: R.E. Valencia
69) Ca. Rivera No, Azogues – **L.P:** Dir. Gen: H. Vicuña V – **D.Prgr: N:** 11.30, 12.00, 02.00 – **Ann:** "Ondas Cañaris en sus dos frecuencias HC5OC" – **V.** by letter. Records accepted – **F.Pl:** increase power (mw)
70) Azogues – **L.P:** Dir: H. Castañier C – 71) Loja – **L.P:** Dir: F. Coronel – 72) Teatro Roxy, Riobamba – **L.P:** Dir: E. Abbdo.
73) Ibarra – **L.P:** Dir: A. Moran – 74) Cuenca – **L.P:** Dir: D. Pinos.
75) Ibarra – **L.P:** Dir: F. Davilla – 76) Av. Mariano Acosta, Ibarra.
77) Riobamba – **L.P:** Dir: G. Encalada – 78) Latacunga – **L.P:** Dir: C. Moran B.
79) Apt. 4869, Manta – **L.P:** Dir: E. Bowen – **D.Prgr: N:** 12.30, 17.00, 23.00 – **Ann:** "Transmite R. Manta, con sus estaciones...la mas antigua y potente emisora del puerto, Desde Manta, Ciudad de turismo y primer puerto maritimo en la Provincia de Manabi" – **V.** by QSL-card or letter.
80) Cariamanga – **L.P:** Dir: L. Gustavo Cabezas.

81) **LA VOZ DE LOS ANDES**
Operated by the missionary org: **The World Radio Missionary Fellowship Inc.** No comm. adv. Public sce. and ann. of cultural activities accepted free of charge – **FI:** Supported by voluntary gifts from Evangelical Christian Groups and "Share-the-cost" plan – **ADDR:** Cas. 691, Quito. **Cable:** Vozandes. (USA Office: Voice of the Andes, Box 691, Miami 47, Florida) – **L.P:** Pres: A. Van der Puy. Dir. Gen: R. C. Savage. St. Mgr: F. Cook. Sp. Sce: Dir: W. Padilla. Eng. Sce: Dir: H. Jacobson. Operations Dir: J. Guzman. TV Dir: R. B. Clark.

HOME SCE. in Spanish: D 11.00–03.55.
11.00–14.00 on 700, 6050, 9745, 11915, 15115kc, 14.00–00.30 on 700, 6050, 9745kc, 00.30–02.00 on 700, 6050, 9745, 11915, 15115kc, 02.00–04.30 on 700, 6050, 15115kc, 06.30–07.00 on 6050, 9745, 11915kc, 21.30–22.00 on 11755, 15115kc.
N: Mon–Fri: Every h and half h 11.00–02.00; Sat: Every h and half h 11.00–17.00, 00.30, 01.30; Sun: 11.00, 11.30, 12.30, 13.30, 01.30.

INTERNATIONAL SERVICE

TO EUROPE		Nov/Feb kc	March/April kc	May–Aug kc
04.30–05.30	Russian			
05.30–06.00	Swedish	6050	6050	6050
06.00–06.30	German	9745	9745	9745
06.30–07.00	Spanish	11915	11915	11915 15115[1])
09.30–10.00 (Sun)	Swedish	6050, 9745 11915	9745 11915	9745, 11915 15115
18.00–18.30	Swedish	11755	15115	15115
*18.30–20.30 a)	English	15115	17860	17860
20.30–21.00	Swedish	9745	11755	15115
21.00–21.30	German	11755	15115	17860
21.30–22.00	Spanish	11755, 15115	15115, 17860	15115, 17860
23.30–24.00 e)	English	15115	15115	15115

TO SOUTH PACIFIC

07.00–10.00 b)	English	6050, 9745	6050, 9745	6050, 9745
10.00–10.30	Russian	11915	11915	11915

TO CARIBBEAN

		kc	kc	kc
10.30–11.00 c)	English	9745, 11915	9745, 11915	9745, 11915
**14.00–16.30 d)	English	15115	15115	15115
23.30–24.00 e)	English	17890	17890	17890

TO THE AMERICAS

11.00–14.00	Spanish	6050, 9745 11915, 15115	6050, 9745 11915, 15115	6050, 9745 11915, 15115
14.00–00.30	Spanish	6050, 9745	6050, 9745	6050, 9745
**14.00–16.30 d)	English			
22.30–23.00	Russian	15115	15115	15115
23.00–23.30	German	17890	17890	17890
23.30–24.00 e)	English			
00.30–02.00	Spanish	6050, 9745 11915, 15115	6050, 9745 11915, 15115	6050, 9745 11915, 15115
02.00–04.30	Spanish	6050, 15115	6050	6050
02.00–04.30 f)	English	9745, 11915	9745, 11915 15115	9745, 11915 15115

TO BRAZIL

22.00–22.30	Japanese	15115	15115	15115
23.00–23.30	German	17890	17890	17890
00.00–00.30	Portug.			

[1]) From 05.30 – *) D. exc. Mon – **) Tues–Fri 14.00–15.00; Sun/Mon 14.00–16.00; Sat 14.00–16.30 – a) "Quito Calling" – b) "Southern Cross Salute" – c) "West Indies Morning Watch" – d) "Morning in the Mountains" – e) "Caribbean Call" – f) "Ecuadorean Echoes".

NEWS: English 14.02, 23.32. **Swedish** Thurs 18.02, 20.32, Fri 05.32. **Japanese** 22.02 (not daily). **Spanish** Every h & half h at 11.00–04.30 (W only).
DX-Party Line: 1st & 3rd Mon of the month 02.30 (to the Americas), 1st & 3rd Wed. of month 09.30 (to Australia/New Zealand) – **Mbg. (English):** Wed. 03.30, first Mon of month 02.00 – **Time Sig:** Automatically on h and half h. Three short tones followed by a long tone at exact minute.
Ann: E: "This is radio station HCJB located near the line of the equator with studios in the capital city of Quito in the republic of Ecuador. We are serving our internat. audience on the 19.25 and 31 m.b. The time in Quito is... the same as... GMT. This is R. st. HCJB, Quito, Ecuador, So. America" – **V.** listeners reports are wanted, these are studied by our engineers. If requested they are answered by QSL-card, in other by letter – **Pub:** Int. prgr.sched. free on request. "Call of the Andes" magasine free to those requesting it from: HCJB, Box 691, Miami, Fla. 33147, USA. Sched. of Spanish prgrs. on request from Casilla 691, Quito.

82) Apt. 288, Quito – 83) Apt. 30, Tulcan – **L.P:** Dir: H.H. Errera – **Ann:** "La Voz de la simpatica popular" – **V.** by letter. Re. in Sp.
84) Cuenca – **L.P:** Dir: M. Merchan – 85) Soc. Distribuidora Co. S.A, La Urdesa, Guayaquil – 86) Latacunga – **L.P:** Dir: V.H. Muñoz.
87) Apt. 65, Cuenca – **L.P:** Dir. Gen: J.M. Salazar. Dir. Tec: S. Guerrero – **Ann:** "Esta es Ondas del Perpetuo Socorro, transmitiendo en su frecuencia de 6095kc, banda de 49 metros, desde Cuenca Ecuador" – **V.** by letter. Re. in Sp. Prgr. sched. free.
88) Sindicato Choferes, Portoviejo – 89) T. Martinez 209, Guayaquil – **L.P:** Dir: P. Castillo de Levi – 90) Boyaca 1205, Guayaquil – 91) Cas. 726, Azogues – **V.** by letter – 92) Portoviejo – 93) Ricaurte.
94) Cas. 94, Ambato. **Te:** 2120 – **L.P:** Dir. Gen: O.B. Echeverria – **Ann:** "Sintonizan Radiodif. Paz y Bien, la mensajera de Religion, Arte y Cultura, operando en banda internacional de 49 metros y en banda local de 221 mts., desde Ambato, capital de la Provincia del Tungurahua en el Ecuador" – **Int-Sig:** Gong – **V.** by letter.
95) P.O. Box 261, Ambato – **V.** by letter.

Medium Waves:
96) **R. Mambo,** Guayaquil: 11.00–05.00.
97) **R. Casa de la Cultura,** Guayaquil: 11.00–04.00.
98) **R. San Pedro,** Amaguana – **L.P:** A. Villacis: 23.00–03.00.
99) **R. El Tiempo,** Guayaquil – L.P: Dir: R. Calderon P – 24 h.
100) **R. Fenix,** Zaruma: 23.50–03.30.
101) **Centro Radiofonico Sideral,** Quevedo – **L.P:** Dir: Davila de la Rosa. 11.00–05.00 – 102) **R. Ventanas,** Ventanas: 23.00–03.00.
103) **R. Atalaya,** Cas. 204, Guayaquil: 24 h – 104) **R. Cristobal Colón,** Cristobal Colón: 11.00–16.00, 19.00–23.00, 00.00–03.00.
105) **R. Sucre,** Guayaquil: 11.00–06.00 – 106) **R. Huancavilca,** Guayaquil: 11.00–06.00 –
107) **R. Municipal,** Quito: 16.45–19.00, 21.45–04.00.
108) **R. Libertad,** Chone – **L.P:** Dir: E. Espinel Alvares – 24 h.
109) **R. Centenario,** Guayaquil: 11.00–04.00 – 110) **R. La Prensa,** Guayaquil: 11.00–04.00 – 111) **R. Umiña,** Manta: 10.30 –04.00.
112) **R. Noticia,** Quito – **L.P:** Dir: A. Arcentales: 17.00–20.00, 00.00–04.00 – 113) **R. Pacifico,** Quito – **L.P:** Dir: F. Vallejo S: 11.00–04.00.
114) **R. Atalaya,** El Milagro: 11.00–05.00 – 115) **La Voz de los Llanganates,** Pillaro: 23.00–01.00 – 116) **R. Nac. Espejo,** Guayaquil: 24 h.
117) **R. Tricolor,** Ambato: 23.00–03.00 – 118) **La Voz del Santisimo,** 6 de Marzo 1004, Guayaquil: 12.00–19.00, 22.00–03.00.
119) **La Voz del Cacique Guale,** Jipijapa: 11.00–02.00.
120) **R. Ecuatoriana,** Quito: 11.00–04.00.

24 HOURS A DAY

8 LANGUAGES

SPANISH, GERMAN, ENGLISH, RUSSIAN, SWEDISH, JAPANESE, QUECHUA, PORTUGUESE

116 COUNTRIES

HEARD FROM LAST YEAR

HCJB „The Voice of the Andes" Quito, Ecuador

for full details see opposite page

121) **R. 12 de Febrero,** Puyo: 23.00–03.00 – 122) **R. Cristal,** Guayaquil – **L.P:** Dir: A. Romero: 09.00–06.00 – 123) **Ondas Azules,** Santa Rosa – **L.P:** Dir: L. Guayamabe: 11.00–17.00, 20.00–20.30, 02.00–04.30. 124) **Ondas del Chimborazo,** Riobamba: 23.00–03.00.
125) **La Voz del Rio Guayas,** Ejercito 116, Guayaquil: 14.00–04.00. 126) **R. Gemas,** Quito: 11.00–03.00 – 127) **Ondas Orenses,** Machala: 11.30–13.30, 16.00–19.00, 00.30–03.30 – 128) **R. Colón,** Colón 1072, Quito: 17.30–19.30, 01.00–04.00 – 129) **La Voz Liberal,** 8 y 9 de Oct, La Libertad, Guayaquil: 10.30–06.00 – 130) **La Voz de Imbabura,** Ibarra: 11.00–14.00, 16.00–03.00 – 131) **Union Evangelica Misionera,** Colta: 23.00–03.00 – 132) **R. Cronos,** Quito: 11.00–03.00 – 133) **R. Ifesa,** Cia. Industrial S.A, Guayaquil: 13.00–04.00 – 134) **R. Un Mundo Mejor,** Atuntaqui – **L.P:** Dir: J.E. Morales: 11.00–14.00, 16.00–18.00, 23.00–03.00 – 135) **La Voz de los Rios,** Babahoyo – **L.P:** Dir: G.A. Jacome: 23.00–03.00 – 136) **R. Cosmopolita,** Ambato 1142, Quito – **L.P:** N. Castro: 13.00–03.00 – 137) **R. Continente,** Ibarra – **L.P:** Dir: M. Baez R: 11.00–19.00, 21.00–04.00 – 138) **Ondas del Pacifico,** Colón 234, Guayaquil: 11.30–05.00 – 139) **R. El Prado,** Riobamba: 23.00–03.00 – 140) **R. Mambo,** Guayaquil – **L.P:** Dir: J.J. Vilaseca – 141) **R. Suceso,** Guayaquil: 12.00–04.00 – 142) **R. Oriental,** Baños: 24 h – 143) **R. Vision,** Cuenca – **L.P:** Dir: T. Rodas: 11.00–04.00.
144) **R. Cenit,** Manta: 12.00–04.00 – 145) **R. Surcos,** Guaranda: 11.00–13.00, 18.30–19.30, 23.00–03.00.
146) **R. Mil Veinte,** Plaza de Santo Domingo, Quito: 10.45–04.00. 147) **La Voz de Pueblo,** Riobamba: 23.00–03.00 – 148) **La Voz del Valle,** Machachi: 11.45–19.00, 22.30–03.30.
149) **R. Sport,** Quito: 11.00–06.00.
150) **Ecos del Pueblo,** Saquisili – **L.P:** Dir: A. Cueva Y: 23.00–03.00. 151) **R. El Oro,** Machala – **L.P:** Dir: R. Veintimilla A: 11.00–13.00, 17.00–19.00, 00.00–05.00 – 152) **R. Libertad,** Quito – **L.P:** Dir: C. Pesantes T: 11.00–03.00.
153) **R. Nacional Espejo,** Ambato: 11.00–05.00.
154) **R. Noticia,** Vélez 534, Guayaquil: 11.30–06.00 – 155) **R. Sucesos** Quito: 11.00–05.00 – 156) **R. Rey,** Latacunga: 12.00–20.00, 22.00 04.00.
157) **R. Reloj,** Cuenca: 11.00–04.00 – 158) **R. América,** Luque 910, Guayaquil: 11.00–05.00 – 159) **R. Luz,** Ambato: 23.00–03.00 – 160) **Emisoras Tribuna del Sur,** Cuenca – 161) **R. Nuevo Mundo,** Quito: 10.45–04.00 – 162) **La Voz de Riobamba,** Riobamba: 23.00–03.00. 163) **R. Runatacuyac,** B. Quevedo: 21.00–01.00 – 164) **R. Central,** Riobamba: 23.00–03.00 – 165) **R. Tribuna del Sur,** Cuenca – **L.P:** Dir: A. Alfonso Parra: 23.00–03.00.

166) **R. Central,** Maldona Villa 1, Quito: 10.45–05.00 – 167) **R. Excelsior,** Luque 1102, Guayaquil: 13.00–04.00 – 168) **R. Turismo,** Sangolqui: 23.00–03.00 – 169) **La Voz del Tropico,** Quevedo: 23.00–03.00. 170) **R. Atlántida,** Cas. 1020, Quito. **Te:** 13751 – **L.P:** Dir. Gen: G.U-Ordoñez. Dir. Tec: V. Ordoñez P – **D.Prgr:** 14.00–19.00, 23.00–03.30. **N:** 11.00, 00.00 – **Ann:** "Desde Quito, Ecuador, transmite radiodifusora Atlántida, una Voz equatoriana en el cielo de America 1210kc" – **V.** by letter – 171) **R. Colegio San Felipe,** Riobamba: 23.00–03.00.
172) **La Voz del Austro,** Cuenca – **L.P:** Dir: M. Villavicencio: 23.00–03.00 – 173) **R. Riobamba,** Riobamba: 12.00–04.00 – 174) **R. Metropolitana,** Av. Colombia 256, Quito: 11.00–03.00.
175) **La Voz del Litoral,** Junin 206, Guayaquil: 11.00–04.00.
176) **R. Cine,** Ambato – **L.P:** Dir: B. Ortiz: 23.00–03.00.
177) **R. Universal,** Bolivia 715, Guayaquil: 24 h – 178) **R. Cotopaxi,** Pujili: 11.00–17.00, 23.00–05.00 – 179) **R. Mariscal. Sucre,** San Isidro: 11.00–16.00, 23.00–03.00.

180) **R. Cenit,** Av. 9 de Octubre, Guayaquil: 11.00–15.00, 17.00–20.00, 22.00–04.00 – 181) **R. Continental,** "La Voz de la Sierra Ecuatoriana", Ambato: 10.30–03.00 – 182) **R. Guayaquil,** Babahoyo: 23.00–03.00. 183) **R. Victoria,** Quito: 11.00–06.00.
184) **La Voz del Rio Quevedo,** Quevedo – **L.P:** Dir: H.Al. Prado: 11.00–14.00, 16.00–20.00, 22.00–05.00 – 185) **R. Juan Montalvo,** Ambato: 11.00–04.00 – 186) **R. El Tiempo,** Guayaquil 1542, Quito: 11.00–06.00.

187) **R. Continental,** Colón 520, Guayaquil: 12.00–19.00, 22.00–04.00. 188) **R. Tropical,** Manta: 11.30–04.00 – 189) **R. Sira,** Salcedo – **L.P:** Dir: C. Villacreses M: 12.00–14.00, 17.00–19.00, 23.00–03.00.
190) **R. Guayaquil,** Lavellén 222, Guayaquil: 10.00–06.00.
191) **R. Usaid,** Movil: 11.00–14.00, 16.00–18.00, 23.00–02.00.
192) **R. Nueva Ortiz,** Esmeraldas 1912, Guayaquil: 11.00–04.00.
193) **R. Reloj,** Quito: 11.00–06.00 – 194) **R. El Triunfo,** Esmeraldas – **L.P:** Dir: D. Alvarez Tenorio: 11.00–05.00.

195) **R. Consular,** Tulcan – **L.P:** Dir: F. Pazos M: 23.00–03.00. 196) **Ecos de Jambeli,** Puerto Bolivar – **L.P:** Dir: M. Alvarez M: 11.00–04.00 – 197) **R. Puruha,** Riobamba: 23.00–03.00 – 198) **R. Voz de Pujili,** Pujili: 23.00–03.00 – 199) **R. Cordillera,** Apt. 1003, Quito: 11.30–04.00 – 200) **R. Panamericana,** Benalcazar 697, Quito: 10.30–19.00, 21.30–03.00 – 201) **La Voz del Guabo,** El Guabo: 11.00–13.00, 17.00–19.00, 23.00–05.00 – 202) **R. Exito,** Quito – **L.P:** Dir: J. Rodriguez: 11.00–05.00 – 203) **La Estacion de la Alegria,** Esmeraldas: 23.00–03.00.

FALKLAND ISLANDS

L.T: GMT–4 h (April–Sept: –3 h) – Pr.L: English.

FALKLAND ISLANDS BROADCASTING SERVICE (Go.)
FI: By license payments and Go. grant – ADDR: Broadcasting Studios, Stanley. Cable: Broadcasts. Te: 90 – L.P: Dir: Ch. T. Reive.
STATIONS: 585kc 513m 5kW – 3958kc 75.79m 0.5kW.
HOME SCE: W 22.45(Sat 21.30)–01.00(Sat 02.00). Sun 21.45–01.30 – N: BBC: W 11.00 (Oct–March), 13.00 (April–Sept), 23.00 (Oct–March), 00.00 (April–Sept). Local N: Fri 23.35 – ANN: "This is the Falkland Islands Broadc. Station" – V. by letter. Reports from So. America only.
The Marconi Company Ltd. G.B, delivered 5kW mw-tr.

GUIANA (British)

L.T: GMT–3¾ h – Pr.L: English.

BRITISH GUIANA BROADCASTING CO. LTD. (Comm.)
FI: By adv – ADDR: Broadc. House, Philip's Green, High St. Georgetown. Cable: Broadcast. Te: 2691 – L.P: Gen. Mgr: E. A. D. Saul. A.M.I.E.R.E. Eng-in-charge: W. Rogers M.I.N.

STATIONS: ZFY (R. Demerara) and B.G.B.S. (560kc)

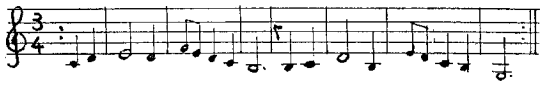
560 kc	536 m	10 kW	–	3265 kc	91.87 m	2 kW	
760 –	395 –	10 –	–	5980 –	50.17 –	2 –	

B.G.B.S: 560kc: W 09.45–01.50, Sun 10.45–01.50.
ZFY: 760kc: 09.15(Sun 09.45)–02.45(Sat 03.45); 3265kc: 19.45–02.45 (Sat 03.45); 5980kc: 09.15(Sun 09.45)–19.45.
N. (*=BBC): W 09.48, 10.15, 11.15, 13.00*, 15.10, 16.00*, 20.00*, 20.10, 21.10, 22.00, 23.10, 00.45, 02.43. Sun 11.10, 16.00*, 16.10, 20.00*, 23.10, 00.45, 02.43.
ANN: On 560kc: "This is B.G.B.S. the British Guiana Broadc. Sce". On 760/3265/5980kc: "This is R. Demerara, British Guiana" – V. by QSL-card. Records accepted – PUB: Prgr.schedule (weekly).

GUIANA (French)

L.T: GMT –4 h – Pr.L: French.

RADIODIFFUSION TELEVISION FRANCAISE
AD: D. 01.3P – Fee: 25NF – ADDR: Av. Mme Payée prolongée, Cayenne. Te: 355 – L.P: Dir. Gen: M. Reiber. St. Mgr: G. Guimon. Mgr: M. Garin. Dir. Tec: M. Edel.
STATION: (System TRT): 6170kc 48.62m 1kW.
HOME SCE: 10.15–11.30, 16.15–18.30, 02.00 (Sat 03.00). N: 10.30, 22.45, 01.00 – ANN: "Ici Cayenne, Radiodiffusion Télévision Francaise" – INT-SIG: Guitar



V. by letter. Rp. Reports to P.O. Box 336, Cayenne. Records accepted – F.Pl: 1kW mw-tr; change of sw to tropical band.

PARAGUAY

L.T: GMT–4 h – Pr.L: Spanish.

ADMINISTRACION NACIONAL DE TELECOMUNICACIONES
ADDR: Administración General, Cas. Correo 84, Asunción. Cable: Antelco. Te: 4001 – L.P: Dir: B. Guanes S.

STATIONS: All st's comm. exc. R. Nacional.
Short Waves: Call: ZP---.

	Call	kc	m	kW	N. and h of tr.
1)	A6	5975	50.21	3	R. Guairá, Villarrica: 12.00–18.00, 21.00–03.00
2)	A10	6015	49.88	1	R. Paraguay, Asunción: 10.00–19.00, 20.00–02.00
3)	A1	6025	49.79	3	R. Nacional, Asunción: 11.00–17.00, 20.00–02.00
4)	A11	6110	49.10	1	R. Charitas, Asunción: 15.00–01.00
5)	A3	11850	25.32	3	R. Teleco, Asunción: 14.00–23.00
6)	A5	11945	25.12	5	R. Encarnación: 11.00–14.00, 16.00–24.00
7)	A7	15210	19.72	3	R. Guarani, Asunción: 12.00–16.00, 19.00–03.00

Medium Waves: Call: ZP--. °=Short Wave. *=also FM.

	Call	kc	kW		Call	kc	kW		Call	kc	kW
8)	15	560	0.25	3)	1	°920	10	13)	19	1330	1
9)	16	640	1	11)	9	970	1.5	1)	6	°1360	1.5
10)	12	700	10	12)	14	1020	5	5)	3	°1430	1
7)	7	°730	1.5	4)	11	°1200	1.5	14)	8	1480	1
6)	5	°760	20	2)	10	°1300	1.5				

Short Waves:
1) Alejo Garcia y Pte. Franco, Villarrica. Te: 85 – L.P: Dir: E. Traversi V – Ann: "ZP6 y ZPA6, R. Guairá, Voz de Progreso y Cultura" – V. by QSL-card or letter.
2) Av. Dr. Gaspar R. de Francia 343, Asunción – L.P: Dir. Gen: G. H. Mora – V. by QSL-card. Rp.
3) Victor Haedo 224, Asunción – L.P: Dir. Gen: A. Cáceres Almada. Dir. Tec: P. Pereira – D.Prgr: N: 16.30, 23.30, 02.30 – Ann: "ZP1 y ZPA1, R. Nacional del Paraguay" – V. by letter.
4) L. A. de Herrera 364, Asunción.
5) Av. Gral. Artigas y Bañado, Asunción – L.P: Dir. Gen: M. Samaniego – Ann: "ZP3 y ZPA3, R. Teleco, Asunción, República del Paraguay" – V. by letter – 6) Encarnación – L.P: Dir: A. Vera – V. by letter.
7) Independencia Nac. 703, Asuncion. Te: 6393 – L.P: Dir. Tec: M. Saccarello – V. by letter.

Medium Waves:
8) La Voz de Amambay, Pedro Juan Caballero.
9) R. Pte. Strossner, Puerto Pte. Strossner.
10) R. Carlos Antonio López, Alberdi 200, Pilar. Te: 54. L.P: Dir. Gen: M. A. Rodriguez. Dir. Tec: M. A. Stete. D.Prgr: 10.00–04.00. N: 16.00. Ann: "Zp12 R. Carlos Antonio López, La Voz del Neembucu, La onda de la cordialidad". F.Pl: 1kW sw-tr. in 1965.
11) R. Comuneros, Estados Unidas y 9° Pdas, Asunción.
12) R. Nanduti, Antiguera e L. A. de Herrera y Azara, Asunción.
13) R. Nuevo Mundo, Cnel. Oviedo, Nuevo Mundo.
14) R. Concepcion, Concepción.

PERU

L.T: GMT–5h – Pr.L: Spanish.

JUNTA PERMANENTE NACIONAL DE TELECOMUNICACIONES
ADDR: Av. Arequipa 734, Lima. Te: 35–965.

STATIONS: All st's comm. exc: 72, 74, 79, 80, 81, 99, 156 (Go); 17, 34, 41, 76, 93, 119, 146, 171, 172 (Cult).
Short Waves: *=inactive.

	Call	kc	m	kW	Name	h of tr
1)	OBZ4C	3215	93.30	0.3	R. Mundo, Huancayo	
2)	OBX7D	3230	93.00	0.4	R. El Sol de los Andes, Juliaca	
3)	OBX4U	3240	92.59	1	R. América, Lima	13.00–06.00
4)	OBX1E	3280	91.40	1	R. Chulucanas, Chulucanas	
5)	OBZ4E	3290	91.90	0.5	R. Cultura, Callao	
6)	OBX4Y	3300	90.85	0.5	R. Junín, Huancayo	
7)	OBZ4I	3320	90.34	1	R. Prelatura Nullius de Yauyos	
8)	OAX3P	3325	90.23	0.5	R. Tingo María, Tingo María	
9)	OAX1M	3330	90.09	1	R. Progreso, Piura	12.00–05.00
10)	OAX5J	3350	89.55	1	R. Independencia, Ica	
11)	OAX3Q	3355	89.42	1	R. Ondas de Huallaga, Huánuco	
12)	OAX3D	3360	89.29	0.5	R. Huánuco, Huánuco	
13)	OAX1O	3380	88.76	1	R. Chiclayo, Chiclayo	12.00–05.00
14)	OBZ4W	3385	88.63	1	R. La Voz del Valle del Mantaro, Jauja	
15)	OAX6O	3710	80.86		R. Mollendo, Mollendo	
16)	OAX3G	3890	77.12	0.5	R. Chimbote, Chimbote	12.00–06.00
17)	OAX7O	3960	75.76	0.5	R. Madre de Dios, Puerto Maldonado	23.00–06.00
8)	OAX3W	4760	63.03	0.5	R. Tingo María, Tingo María	
18)	OCX4W	4762	63.00	0.25	R. Inca, Lima	11.00–06.00
19)	OAX2G	4770	62.89	0.5	R. Cajamarca, Cajamarca	
20)	OAX3V	4785	62.70	1	R. Tingo María, Tingo María	
21)	OAX5X	4790	62.63	0.4	R. Nazca, Nazca	12.00–06.00
22)	OBX7C	4800	62.50	0.5	R. Onda Azul, Puno	12.00–06.00
23)	OBX1C	*4815	62.31	1	R. La Voz de la Frontera, Tumbes	
24)	OAX8X	4815	62.31	1	R. Amazonas, Iquitos	
25)	OAX5U	4815	62.31	1	R. La Voz, Huamanga	
26)	OAZ4G	4820	62.24	0.4	R. La Oroya, La Oroya	
27)	OAX8R	4825	62.18	0.3	R. San José, Iquitos	
28)	OAZ4J	4835	62.05	0.5	R. Ritmo, Lima	
29)	OAX7T	4835	62.05	0.35	R. Sicuani, Sicuani	
30)	OAX8F	4840	61.98	1	R. Atlántida, Iquitos	
31)	OAX1X	4845	61.92	1	R. Chira, Sullana	
32)	OCX4B	4850	61.86	0.5	Nueva R. Callao	12.00–05.00
33)	OAX8I	*4855	61.79	0.5	R. La Hora, Iquitos	
34)	OCX4T	4870	61.60	0.5	R. Cultural, Huancayo	23.30–01.30
35)	OCX4E	4880	61.48	1	R. Once Sesenta, Lima	12.00–05.00
36)	OAX5V	4885	61.45	1	R. Villa Rica, Huancavelica	
37)	OAZ4T	4895	61.29	0.4	R. Chanchamayo, La Merced	
38)	OAX2K	4910	61.10	0.5	R. Libertad, Trujillo	11.55–04.00
39)	OAX2H	4920	60.89	0.5	R. La Hora, Trujillo	12.00–06.00
40)	OBX7H	4920	60.89	1	R. Ondas del Titicaca, Puno	
41)	OAX5Q	4934	60.80	0.25	R. Cultural, Abancay	
42)	OAX9E	4935	60.80	1	R. Tropical, Tarapoto	

	Call	kc	m	kW	Name	q of tr.
43)	OAX6N	4940	60.73	0.5	R. Misti, Arequipa	12.00–04.30
44)	OAZ4R	4940	60.73	0.5	R. San Juan, Tarma	12.00–04.30
45)	OAZ4I	*4945	60.67	0.4	R. Huacho, Huacho	
17)	OBX7I	4950	60.60	0.5	R. Madre de Dios, Puerto Maldonado	
46)	OAX5S	4955	60.54	0.25	R. Amauta, Huanta	17.30–23.30
47)	OAX1S	4960	60.48	0.5	R. Lambayeque, Chiclayo	11.15–05.00
48)	OBX4Z	4980	60.25	1	R. Agricultura, Lima	
49)	OAZ4C	4995	60.06	1	R. Andina, Huancayo	11.00–05.00
50)	OAX2S	5005	59.94	1	R. Jaén, Jaén	
51)	OAX50	*5010	59.88	1	R. Pisco, Pisco	
52)	OAX8V	5010	59.88	0.4	R. Eco, Iquitos	
53)	OAX5R	5020	59.76	0.15	R. San Cristobal de Huamanga, Ayacucho	
54)	OAX7Q	5025	59.70	0.3	R. Quillabamba, Quillabamba	
55)	OBX7F	5035	59.58	0.5	R. Ayaviri, Ayaviri	
56)	OAX6U	5035	59.58	1	R. Ilo, Ilo	
57)	OBZ4P	5040	59.52	1	R. Reloj, Lima	
17)	OBX7J	5042	59.50	0.5	R. Madre de Dios, Pto. Maldonado	
58)	OAX1J	5050	59.41	1	R. Tumbes, Tumbes	
59)	OAZ4A	5058	59.31	1	R. Tarma, Tarma	
60)	OAX2A	5225	57.42	2	R. Trujillo, Trujillo	12.15–05.30
61)	OAX5X	5440	55.15	1	R. Huancavelica, Huancavelica	
13)	OAX1O	5680	52.78	1	R. Chiclayo, Chiclayo	12.00–05.00
62)	OAX3E	5710	52.57	0.5	R. Huaraz, Huaraz	
63)	OAX7Z	5800a	51.72	0.5	R. Juliaca, Juliaca 17.00-19.00, 22.00–04.00	12.00–14.00
64)	OCX4R	5830	51.46	0.1	R. Industrial, La Oroya	
65)	OAX7K	5838	51.39	0.5	R. Puno, Puno	01.00–04.00
66)	OAX6E	5930	50.59	1	R. Continental, Arequipa	*11.00–06.00*
67)	OAX4P	5950	50.42	0.5	R. Huancayo, Huancayo	11.30–04.30
68)	OAX7L	5960b	50.34	1	La Voz del Altiplano, Puno	
69)	OAX6A	5960	50.34	0.3	R. Arequipa, Arequipa	12.00–04.30
70)	OBX4Q	5970	50.25	10	R. El Sol, Lima	11.00–05.00
71)	OBX4M	5980	50.17	5	R. Panamericana, Lima	12.00–06.00
3)	OAX4V	5995	50.04	3	R. América, Lima	13.00–06.00
72)	OAX7E	6000	50.00	1	R. Nacional, Puno	12.00–05.00
73)	OAX4Q	6010	49.92	3	R. Victoria, Lima	11.00–06.00
74)	OAX8B	6028	49.77	1	R. Nacional, Iquitos	12.00–05.00
75)	OAX6B	6038	49.69	0.5	R. Landa, Arequipa	*12.00–05.00*
76)	OBZ4O	6050	49.59	2.5	R. Arzobispado, Lima	
77)	OAX8L	6062	49.48	1	R. Telesar, Pucallpa 16.00–19.00, 23.00–03.00	12.00–14.00
78)	OAX4S	6070	49.42	0.3	R. Onda Popular, Lima	24 h
79)	OAX4Z	6082	49.32	10	R. Nacional, Lima	12.00–05.00
80)	OAX6F	6105	49.14	1	R. Nacional, Tacna	12.00–05.00
81)	OAX4H	6115	49.06	0.3	R. Mundial, Lima	12.30–05.00
82)	OBX4Z	6115	49.06	1	R. Luz, Lima	12.00–05.00
83)	OCX4A	*6123	49.01	1	R. La Crónica, Lima	
84)	OCX4M	6135	48.90	0.5	R. Pasco, Cerro de Pasco	
85)	OAX9B	6140	48.86		R. Amazonas, Chachapoyas	
86)	OBX4G	6150	48.78	2	R. Excelsior, Lima	12.00–05.00
1)	OCX4G	6160	48.70	1	R. Mundo, Huancayo	11.00–05.00
9)	OAX1N	6170d	48.62	1	R. Progreso, Piura	12.00–05.00
87)	OBX4B	6170	48.62	0.3	R. Corporación, Cerro de Pasco	10.00–05.00
88)	OAX7C	6175	48.58	0.3	R. Tahuantisuyo, Cuzco	
89)	OAX4G	6190	48.47	0.4	R. Lima, Lima	12.00–07.00
90)	OAZ4E	6195	48.43	0.5	R. Minería, La Oroya	
91)	OAX1B	6198e	48.40	0.25	R. Piura, Piura	12.00–05.00
92)	OAX7A	6200	48.39	1	R. Cuzco, Cuzco	23.00–05.00
93)	OAX6U	6235	48.10	1	R. Universidad, Arequipa	12.00–03.30
94)	OBX4P	6300	47.62	1	R. Miraflores, Lima	13.00–05.00
95)	OAX1A	6700	44.78	0.3	R. Delcar, Chiclayo	00.00–05.30
66)	OAX6D	9350	32.09	1	R. Continental, Arequipa	11.00–06.00
83)	OAX4J	9390	31.95	5	R. La Crónica, Lima	11.15–07.00
3)	OAX4W	9412	31.87	1	R. América, Lima	13.00–06.00
96)	OAX6H	9500	31.58	0.25	R. Tacna, Tacna	10.30–05.20
97)	OAX8E	9504	31.56	1	R. Loreto, Iquitos	11.00–05.00
80)	OAX6L	9530	31.48	1	R. Nacional, Tacna	12.00–05.00
33)	OAX8I	9540	31.45	0.5	R. La Hora, Iquitos	
98)	OAX4K	9545	31.43	0.5	R. Central, Lima	12.00–06.00
99)	OAX1Z	9550	31.41	2.5	R. Nacional, Tumbes	*12.00–05.00*
79)	OAX4R	9562	31.37	40	R. Nacional, Lima	12.00–05.00
72)	OAX7F	9570	31.35	1	R. Nacional, Puno	12.00–05.00
100)	OAX8Q	9755	31.33	0.4	R. Pucallpa, Pucallpa	
101)	OBX4K	9585	31.30	0.75	R. Selecta, Lima	13.00–04.30
102)	OAX5C	9590	31.28	1	R. Ica, Ica	11.00–04.00
103)		9600	31.25		R. Ayacucho, Ayacucho	
104)	OAX1R	*9600	31.25	0.45	R. Talara, Talara	
74)	OAX8C	9610	31.22	1	R. Nacional, Iquitos	12.00–05.00
2)	OBX7E	9618	31.19	0.4	R. El Sol de los Andes, Juliaca	
30)	OAX8K	9625	31.17	1	R. Atlántida, Iquitos	11.00–05.00
105)	OCX4K	9635	31.14	1	R. Expreso, Lima	12.00–05.00
106)	OAX1T	9645	31.10	1	R. Grau, Piura	
52)	OAX8U	9665	31.04	1	R. Eco, Iquitos	
107)		9675	31.01	7.5	R. Del Pacífico, Lima	
108)	OCX4Y	9695	30.94	1	R. Continente, Lima	11.30–06.00
42)	OAX9D	9710	30.90	1	R. Tropical, Tarapoto	11.30–04.45
109)	OAX7J	*9730	30.83	0.5	R. La Hora, Cuzco	
110)	OAX8W	9750	30.77	2.1	R. Sideral, Pucallpa	
24)	OAX8O	9770	30.71	1	R. Amazonas, Iquitos	
111)	OBX7O	11820	25.38	1	R. Imperial, Cuzco	
79)	OBX4R	*11914	25.19	10	R. Nacional, Lima	
79)	OAX4T	15150	19.80	40	R. Nacional, Lima	irr.
70)	OBX4C	15180	19.76	0.5	R. El Sol, Lima	11.00–05.00
79)	OBX4T	*21600	13.89	10	R. Nacional, Lima	

FM: 112) 88.9Mc 10kW R. Chalaca, Callao – 70) OBX4F 90.1Mc 0.25kW R. El Sol, Lima – 79) OCX4N 97Mc 0.05kW OCX4O 98Mc 0.05kW R. Nacional, Lima – 113) OCX4U 100Mc 5kW R. Cien FM, Lima – 71) OBZ4D 101Mc 1kW R. Panamericana, Lima – 107) OAZ4K 102Mc 1kW R. Del Pacífico, Lima.

Notes:
a) Official freq. is 5015kc, announces 6050kc, actually on approx. 5800kc – b) *Actually on approx. 5850kc* – c) *Acutally on approx.* 4940kc – d) Actually on approx. 5850kc – e) Actually on approx. 6125kc.

Medium Waves °=also on Short Wave.

	Call	kc	kW		Call	kc	kW
114)	OBZ4L	560	1	4)	OBX1D	°1080	1
115)	OAX3K	570	1	139)	OAX7S	1080	0.8
116)	OCX4S	580	0.15	24)	OAX8N	°1080	1
82)	OBX4L	°590	10	8)	OAX3I	°1080	0.5
117)	OAX3M	600	1	140)		1090	1
118)	OAX2M	620	0.4	59)	OAX2B	°1095	2
119)	OAX7W	620	1	141)	OAZ4W	1100	1
25)	OAX5T	°620	1	79)	OBX4A	°1120	
51)	OAX5P	°620	1	101)	OAX4N	°1130	3
107)	OAZ4K	°640	10	65)	OAX7H	°1130	1
22)	OBX7B	°640	1	104)	OAX1Q	°1130	1
120)	OAX5R	650	1	37)	OAZ4S	°1130	
121)	OAX2N	650	1	142)	OAX3R	1140	1.2
5)	OAX4L	°670	1	143)	OAX5W	1140	0.5
76)	OBZ4N	°680	10	35)	OAX4C	°1160	5
66)	OAX6C	°690	2	72)	OAX7D	°1160	1
16)	OAX3F	°690	0.5	99)	OAX1K	°1160	2.5
122)	OBZ4H	700	1	62)	OAX3B	°1160	0.5
123)	OBZ4Q	710	0.15	38)	OAX2C	°1160	0.3
28)	OBX4S	°730	1	80)	OAX6D	°1165	0.35
10)	OAX5E	°730	0.5	9)	OAX1D	°1170	4
124)	OAX2J	730	1	144)	OAX3O	1180	0.5
91)	OAX1Y	°750	0.3	145)	OBZ4A	1180	0.5
125)	OAX3T	750	1	89)	OAX4B	°1200	1
126)	OBX7N	770	0.4	88)	OAX7B	°1200	0.3
73)	OAX4X	°780	10	146)	OAX8M	1200	0.5
127)	OAX2I	790	1	147)	OAX2Q	1210	1
128)	OBZ4B	800	1.3	79)	OCX4Z	°1225	3
129)	OAX4O	820	1	93)	OAX6I	°1237	
130)	OBX7M	830	0.5	106)	OAX1H	°1240	2
131)	OBX1I	830	1	100)	OAX8P	°1250	0.4
132)	OAX3S	830	1	94)	OAX4L	°1250	5
79)	OAX4A	°854	20	102)	OAX5B	°1270	1
133)	OAZ4Y	870	0.2	40)	OBX7G	°1270	1
70)	OBX4X	°900	10	52)	OAX8T	°1270	1
134)	OBX1G	920	1	45)	OAZ4H	°1270	1
135)	OBZ4J	920	1	112)	OBZ4K	1280	5
136)	OAX2T	920	0.4	148)	OAX4M	1300	1
98)	OAX4E	°930	5	149)	OAX6P	1300	0.4
137)	OAX2E	940	1	63)	OAX7H	°1300	0.3
71)	OAX4D	°960	10	83)	OAX4I	°1320	10
39)	OAX2F	°980	1	150)	OAX6K	1320	0.3
105)	OBX4J	°985	5	104)	OAX1F	°1320	1
14)	OBZ4R	°990	1	42)	OAX9C	°1340	1
3)	OAX4U	°1010	10	151)	OAX5D	1340	0.3
78)	OBX4O	°1030	1	152)	OAZ4M	1340	0.2
68)	OAX7N	°1030	0.25	103)	OAX5H	°1340	0.5
74)	OAX8A	°1030	1	153)	OAZ4Q	1340	0.5
138)	OAZ2P	1040	1	13)	OAX1E	°1340	1
43)	OAX6L	°1050	1	11)	OAX3N	°1350	1.5
20)	OAX3U	°1060	1	86)	OAX4Y	°1360	3
81)	OAX4F	°1080	3	29)	OAX7R	°1360	0.35

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	Call	kc	kW		Call	kc	kW
154)	OAX3H	1370	1	26)	OAZ4F	°1470	0.4
155)	OAZ40	1370	0.4	92)	OAX7G	°1470	1
156)	OAX8G	1370	0.5	33)	OAX8H	°1470	1
157)	OAX5I	1370	0.5	164)	OBX4I	1490	
61)	OAX5F	°1370	0.5	84)	OCX4P	°1490	0.3
6)	OBX4V	°1370	1	30)	OAX8J	°1490	1
19)	OAX2D	°1370	0.5	41)	OAX5L	°1490	0.25
58)	OAX1G	°1370	1	21)	OAX5N	°1490	0.5
97)	OAX8D	°1380	1	165)	OCX4V	1510	0.3
44)	OAZ4P	°1400	0.5	59)	OCX4J	°1510	0.1
32)	OBX4W	°1400	2.5	166)	OAX2L	1510	1
158)	OAX2O	1400	1	57)	OBX4D	°1520	1
75)	OAX6J	°1400	1	111)	OAX7P	°1520	0.35
109)	OAX7I	°1400	1.5	90)	OAZ4D	°1520	0.5
159)	OAX6S	1420	1.5	49)	OAZ4B	°1520	1
160)	OBX1H	1420	0.5	95)	OAX1C	°1520	1
161)	OAZ4V	1430	0.5	167)	OBZ4S	1530	1
108)	OCX4X	°1440	1	87)	OBX4N	°1540	0.35
162)	OAX6R	1440	1	168)	OAZ4N	1540	0.15
23)	OBX1B	°1450		169)	OAX6Q	1540	0.5
47)	OAX1I	°1450	1	170)	OBZ4G	1550	1
31)	OAX1V	°1460	1	171)	OAX7U	1560	0.35
12)	OAX3C	°1460	1	172)	OAX7V	1570	
2)	OAX7W	°1460	1	36)	OAX5M	°1580	0.15
163)	OAX5K	1460	1	1)	OCX4F	°1580	1
18)	OBX4E	°1470	1	48)	OAZ4Z	°1590	5
67)	OCX4D	°1470	1				

Short Waves:

1) Ca. 426, Huancayo – **L.P:** Dir: M. Huanay G – V. by letter.
2) Juliaca – **L.P:** J. Cornejo P.
3) Esquina Montero Rosas y Marriano Carranza, Lima – **L.P:** St. Mgr: N. Gonzalez – **Ann:** "La Voz del Nuevo Mundo, desde Lima".
4) Chulucanas – 5) García y García 202, La Punta, Callao – **L.P:** St. Mgr: R. Nieto P.
6) Callao 120, Huancayo – **L.P:** Mgr: R. Tasa Z – V. by QSL-card.
7) Nuevo Imperial, Cañete – 8) Jirón Independencia 218, Tingo María. **L.P:** Dir: L. Infantes G.
9) Ica 419, Piura – **Ann:** "R. Progreso de Piura transmite para todo el Perú" – 10) Cajamarca 194, Ica – 11) Huánuco y Abtao, Huánuco – **L.P:** Dir: F. Llanos M – 12) Huánaco.
13) Balta 618, Chiclayo – **Ann:** "La Emisora Más Popular del Norte" or "R. Chiclayo transmitiendo para todo el Perú".
14) Junin 834, Jauja – 15) Mollendo.
16) Bolognesi 513, Chimbote – **Ann:** "La Emisora de los mejores programas" or "Transmite OAX3F R. Chimbote en 690kc de frecuencia desde el Departamento de Ancash, Perú. Emisora afiliada a R. Victoria de Lima".
17) Puerto Maldonado, Madre de Dios – **L.P:** Dir: P. Joaquín B. Dir. Tec: T. Guerrero – **Ann:** "Emisora Madre de Dios en Maldonado, Emisora Cultural al servicio de la Iglesia Católica".
18) Av. Wilson 1191, Lima – 19) Plaza de Armas, Cajamarca.
20) Av. Raymondi, Lote 6, Tingo Maria – **L.P:** T. Maldonado B.
21) Apt. 54, Nazca. **Te:** 2199 – **L.P:** Dir: A. Cordoba B. St. Mgr: E. Cajo E – **Ann:** "OAX5N y OAX5X R. Nazca su compañera musical transmite en sus frecuencias de 1490kc y 4790 ondas media y corta respectivamente de sus estudios en urbanizacion pencal, Nazca Peru" – V. by letter. Rp. Records accepted – **F.Pl:** Increase power.
22) Conde de Lemos 230, Puno – 23) Alfonso Ugarte 12, Tumbes.
24) Jiron Lima s/n, Iquitos – **L.P:** B. Solsol E.
25) Pasaje Macate 151, Huamanga – **L.P:** F. Cruz M.
26) Ca. Tarma 195, La Oroya – **Ann:** "OAZ4F, 1470kc onda larga y OAZ4G en 4820kc onda tropical, banda de 60 mts, R. La Oroya de la Oroya, afiliada a la Asociación de R. Victoria, Lima, Perú".
27) Vicariato Apostólico San José del Amazonas, Iquitos.
28) José Díaz 190, Lima – 29) Plaza de Armas 106, Sicuani – **Ann:** "La Voz de Canchis".
30) Apt. 277, Iquitos – **L.P:** Dir: J. Reátegui B. Dir. Tec: M. Panduro. **Ann:** "Una voz loretana para el Perú y el mundo" or "La Emisora de los mejores programas" – V. by QSL-card – 31) Sucre 556, Sullana.
32) Colón 260, Callao. **Te:** 91000 – **L.P:** Dir. Gen: A. Salazar P. Dir. Tec: C. Freunt – **D.Prgr:** N: 11.00, 13.00, N. in English: 16.00–16.25 – **Ann:** "OBX4W 1400kc y OCX4B 4850kc, transmite Nueva R. Callao" or "La Voz del Primer Puerto del Perú" – V. by letter. Records accepted – **F.Pl:** 10kW.
33) San Martín 126, Iquitos – **Ann:** "La Voz de la Juventud Loretana en el Cielo Amazónico".
34) Cas. 245, Huancayo – **Ann:** "R. Cultural "La Merced" en su frecuencia de 4870kc banda de 60 metros desde Umutu, Huancayo, Perú" – V. by letter. Records accepted – **F.Pl:** mw, 5kW sw.
35) Av. Alfonso Ugarte 980, Lima – **L.P:** Dir. Tec: J. Seminario – **Ann:** "R. Once Sesenta, la primera emisora dedicasa a la mujer".
36) Virrey Toledo 468, Huancavelica – **L.P:** F. Cruz M.
37) Ca. Tarma 438, La Merced – **Ann:** "R. Chanchamayo OAZ4S 1130kc y OAZ4T 4895kc, onda corta, banda de 60 metros transmite R. Chanchamayo desde La Merced, Capital Cafetelera del Perú, emisora afiliada a la Cadena Nacional de R. Victoria".
38) Bolivar 437, Trujillo – **L.P:** C. Burmester B – **Ann:** "R. Libertad, La Voz del Pueblo y la Juventud".
39) Zepita 439, Trujillo – **Ann:** "R. La Hora, la emisora de los exitos".
40) Ca. Arequipa 323, Puno – 41) Abancay.
42) Jirón Bolognesi, Tarapoto – **L.P:** Mgr: J. Pablo M. Dir: C. Augusto S – **Ann:** "La Emisora más potente del Oriente Peruano" or "Una voz Sanmartiniana para el Perú y toda América" – V. by letter.
43) Apt. 657, Arequipa – **L.P:** Mgr: R. Zúñiga G.
44) Jirón Huánuco 488, Tarma – 45) Av. Echenique 140, Huacho.
46) Cas. 24, Huanta, Ayacucho – **L.P:** M. Cueva T – **Ann:** "R. Amauta, Estación Cultural en Huanta, Perú" – 47) Balta 413, Chiclayo.
48) Paseo Colón 417, Lima – **L.P:** Comm. Mgr: B. Dextre. Mgr. Dir: M. Fernández M – **Ann:** "La Voz del Agro Nacional".
49) Ca. Real 319, Chilca, Huancayo – **Ann:** "Del centro urbano más importante transmite R. Andina" – V. by letter – 50) Ca. Comercio 301, Jaén – **L.P:** Dir: A. Vilchez R.
51) Av. Huayna Capac 1345, Pisco – **L.P:** Dir: A. Pereyra B.
52) Ca. Morena 20–22, Iquitos – **L.P:** Dir: F. Reátegui S.
53) Obispado de Ayacucho, Pasaje Protzel, Ayacucho – **Ann:** "Desde Ayacucho, R. San Cristobal de Huamanga" – 54) Espinar 354, Quillabamba – **L.P:** Dir: C. Lizárraga – 55) Jorge Chávez 314, Ayaviri.
56) Cas. 90, Ilo – **L.P:** Dir: L. Sárdon U – **Ann:** "En la costa sur del Perú, transmite R. Ilo en la banda tropical de 60 mts, 5035kc, desde Ilo, República del Perú" – 57) Ocoña 484, Lima – 58) Plaza de Armas, Tumbes – **Ann:** "La Voz de la Juventud".
59) Cas. 167, Tarma.
60) Almagro 349, Trujillo – **L.P:** Dir: J. Castro – **Ann:** La Voz del Norte del Perú" – V. by letter.
61) Chachapoyas 104, Huancavelica – 62) Jirón Cuzco 107, Huaraz.
63) Ca. 9 de Diciembre 199, Juliaca – **L.P:** Dir. Gen: J. Zea Gonzalez. Dir. Tec: V. Urviola – **Ann:** "Desde el corazón de los Andes" – V. by letter – 64) Gran Mariscal Ramón Castilla Arequipa 201, La Oroya.
65) Arequipa 100, Puno – **L.P:** Dir. Gen: J. Zea Gonzalez. Dir. Tec: R. Laso V – **Ann:** "La Emisora de los Mejores Programas" or "La Voz del Departamento más poblado del Perú" – V. by QSL-card.
66) Rivero 101, Arequipa – **L.P:** Mgr: J. A. Umbert – **Ann:** "OAX6C, OAX6D y OAX6E Emisoras de R. Continental, de Arequipa".
67) Cas. 187, Huancayo – **L.P:** Dir: A. Elejalde G – **Ann:** "La Voz del Centro del Perú" or "OCX4D y OAX4P, R. Huancayo La Voz del Centro del Perú".
68) Apt. 130, Puno – **L.P:** Dir: J. Zea Gonzalez – **Ann:** "En el corazón de los Andes usted escucha la emisora de los grandes éxitos" or "OAX7L, 6950kc y OAX7N, 1030kc, emisoras de la Voz del Altiplano desde Puno, República del Perú".
69) Apt. 657, Arequipa – **L.P:** Mgr: R. Zúñiga G – **Ann:** "La Voz del Misti".
70) José Galvez 1040, Lima – 71) Av. Arequipa 1110, Lima – **L.P:** Dir: H. Delgado P. Dir. Tec: M. Flores – **Ann:** "?Sabe quién transmite? – R. Panamericana" or "Panamericana ciudad de Lima" – V. by letter – 72) Puno.
73) Pasco de la República, Lima – **L.P:** Mgr: J. Cavero. Dir. Tec: E. Lastarria – **Int-Sig:** First Movement of Beethoven's 5th Symphony – V. by letter – 74) Iquitos – V. by letter – 75) Sucre 409, Arequipa – **L.P:** Dir: M. J. Landa – V. by QSL-card – 76) Jr. Carabaya, Lima.
77) Raymondi 185, Pucallpa – **L.P:** Dir: A. Chaque – **Ann:** "R. Telesar, La Voz del Progreso y Cultura" – V. by letter.
78) Av. Roosvelt 105, Lima – **L.P:** Dir. Gen: P. Tello. Dir. Tec: G. Rojas – **Ann:** "R. Onda PO-PU-LAR".
79) Petit Thouars 441, Lima – **L.P:** Dir. Gen: G. Lazarte E. Dir. Tec: R. Raggio & R. Pflucker – **Ann:** "R. Nacional del Perú, la primera emisoras del pais" – V. by QSL-card.
80) Prolongación Unánue, Tacna – V. by letter – 81) Union 733, Lima – **L.P:** Dir: M. Luna. Dir. Tec: D. Capella.
82) Tacna 543, Lima – **L.P:** Dir: W. R. Quintas – **Ann:** "R. Luz, la primera emisora del dial" – V. by QSL-card.
83) Tacna 665, Lima – **L.P:** Dir. Gen: J. Silva. Dir. Tec: W. Liensen.
84) Apt. 128, Cerro de Pasco – **L.P:** Dir: L. Rosazzo – **Ann:** "Radiodifusora Cerro de Pasco S.A, Afiliada a la Federación Peruana de Radiodifusión y Cadena Nacional de Emisoras".
85) Chachapoyas – 86) Camaná 975, Lima – **L.P:** Dir: A. Belmont. Dir. Tec: J. Farfán – **Ann:** "Transmite R. Excelsior la emisora más criolla del Perú" – 87) Apt. 19, Cerro de Pasco – **Ann:** "La Voz de Cerro de Pasco".
88) Av. Sol 930, Cuzco – **L.P:** Dir: R. Montesinos E – **Ann:** "La Emisora de los grandes éxitos".
89) Nicolás de Piérola 533, Lima – **L.P:** Dir: O. Dianderas.
90) Dario León 313–538, La Oroya – **L.P:** Dir: F. Cruz M – **Ann:** "Desde el Corazón de los Andes".
91) Tacna 871, Piura – **Ann:** "La Decana del Departamento" – V. by letter.
92) Montero 114, Cuzco – **L.P:** Dir: C. Lizarraga – **Ann:** "La Voz de la Capital Arqueológica de America".
93) Cas. 23, Arequipa – **L.P:** Dir: J. Cornejo E. Dir. Tec: H. Delgado C – **Ann:** "OAX6I R. Universidad, Emisora Oficial del Instituto Cul-

tural de la Universidad Nacional de San Augustín de Arequipa – V. by letter. Records accepted.
94) Larco 760, Miraflores, Lima – L.P: Dir. Gen: C. Palma S. Dir. Tec: R. Palma S.
95) Av. Balta 658, Chiclayo – L.P: Dir: J. C. Montjoy – Ann: "La Voz del Norte para todo el Perú" or "La Emisora que está más tiempo en su dial" – V. by letter.
96) Cas. 188, Tacna – L.P: Dir: J. Cáceres – Ann: "Transmite R. Tacna y La Voz del Sur simultáneamente" – V. by letter.
97) Arica 30, Iquitos – L.P: Dir: R. Curzado – Ann: "Desde el Corazón de la Amazoná Peruana transmite R. Loreto La Voz del Oriente Peruano" or "Transmite R. Loreto desde Iquitos".
98) Unión 1038, Lima – L.P: Dir: G. D. Brandt, Dir. Tec: A. Gonzalez A – Ann: "En su receptor y en todas partes R. Central, La Emisora más Popular" – 99) Tumbes – V. by letter.
100) Pucallpa – L.P: Dir: J. Reátegui B.
101) Nicolás de Piérola 1014, Lima – L.P: Owner: J. Cavero. Dir: J. C. Andrade – Ann: "Esta es OAX4N, R. Selecta de Lima, una emisora al servicio de la cultura musical del país" – 102) San Martin 251, Ica.
103) 28 de Julio 203, Ayacucho – Ann: "Transmite OAX5H en 1340 kc, R. Ayacucho desde la ciudad de Ayacucho, Perú; emisora afiliada a la organización de R. Victoria de Lima" – 104) Talara.
105) Paseo Colón 299, Lima – Ann: "En 985kc transmite R. Expreso desde Lima, Perú" – 106) Cuzco 850, Piura – L.P: Dir: J. Girón S.
107) Unión 521, Of. 210, Lima – Ann: "Desde Lima, Peru en transmisión de prueba OAZ2K, 640kc, R. Pacífico emisora cultural autorizada por Resolución Ministerial del 5 de Octubre de 1961, perteneciente a la Asociación Cultural ONOA del Perú".
108) 28 de Julio 1389, Lima – Ann: "En 1440kc R. Continente, el punto de sintonía en Lima, Perú".
109) San Bernardo 132, Cuzco – 110) Coronel Portillo 446, Pucallpa – L.P: Dir: F. Rodriguez R – 111) Av. Tulumayo 744-C, Cuzco – 112) Av. Saenz Peña 194, Callao – L.P: Dir: P. de las Casa F.
113) Camaná 631, Lima.

Medium Waves:

114) **La Voz de Oriente,** Lima – 115) **R. Progreso,** Km 415, Carretera Norte Frente Barrio La Florida, Chimbote – L.P: Dir: D. CaamañoM.
116) **R. Imperial,** Ayacucho 598, Cañete – L.P: Dir: R. Pachas.
117) **R. Regional,** Chimbote – L.P: Dir: G. Burmester L.
118) **R. Chepen,** La Libertad – L.P: Dir: J. Tejada T.
119) **Gran Unida Escolar Inca Garcilazo,** Cuzco.
120) **R. Regionalista,** Salaverry s/n, Ica – L.P: Dir: A. Nieri B.
121) **R. Ondas del Norte,** Ca. Salaverry 345, Trujillo – L.P: Dir: A. Rodas V – 122) R. **Progreso,** Gonzalez de la Rosa 470, Lima.
123) **R. Imperial,** Jirón Miguel Grau, Lunahuaná – L.P: Dir: R. Pachas C.
124) **R. Sudamericana,** Independencia 565, Trujillo – L.P: Dir: M. Gamero – Ann: "La Voz del Medio Norte" – V. by letter.
125) **R. Constelacion,** Manuel Ruiz 504, Chimbote – L.P: Dir: J. Castro S – 126) **R. Ilave,** Av. Jáuregui, Juliaca – L.P: Dir: J. Cornejo P.
127) **C.R.U,** Urbanización California, Trujillo – L.P: Dir: G. Delgado B.
128) **R. Centro,** Concepción, Junin – 129) **R. Libertad,** Unión 1038, Lima – Ann: "La Voz de la Juventud".
130) J. San Martin s/n, Quillabamba – L.P: Dir: D. Rosenthal P.
131) **R. Nor-Peru,** Ca. Arica 1030, Chiclayo – L.P: Dir: J. Tejada T.
132) **R. Casma,** Manco Capac 115, Casma – L.P: Dir: J. Castro S.
133) **R. Satipo,** Manzana 10, Satipo – L.P: Dir: J. A. Moreno M.
134) **R. Heroica,** San Jose 1047, 4to Piso, Chiclayo.
135) **R. Bolognesi,** Jirón Loreto 451, Huancayo.
136) **R. Albujar,** Trujillo – L.P: Dir: J. Balarezzo B.
137) **R. Palermo,** Prolongación Sinchi Roca 1103, Trujillo.
138) **R. Constelacion,** Zepita 450, Trujillo – L.P: Dir: G. Burmester L.
139) **R. Salcantay,** Triunfo 370, Cuzco – L.P: Dir: R. Campana.
140) **R. San Miguel,** Piura – Owner: G. Garrido P – F.Pl: 5kW.
141) **R. Musical,** Barranca – L.P: Dir: J. Lesma R.
142) **R. Bahia,** Pasaje 151, Chimbote – L.P: Dir: F. Cruz M.
143) **R. Chinchaysuyo,** Jirón Maurtua 189, Chincha Alta – L.P: Dir: E. Cajo E – 144) **R. Huascaran,** Gamarra 104 – L.P: Dir: M. Barranechea S.
145) **R. San Antonio,** Pablo Nosiglia 235, Cañete.
146) **R. Marina, Vicariato Apostolico,** Iquitos.
147) Mariscal Orbegoso 266, Trujillo – L.P: L. F. Cook L.
148) **R. Atalaya,** Camaná 975, Lima – 149) **R. Latina,** San Martín 561, Tacna – L.P: Dir: C. Urday B.
150) **R. La Voz del Sur,** Tacna – 151) **R. Chincha,** Los Angeles 322, Chincha – L.P: Dir: G. Jordán C.
152) **R .Huaran,** Av. Cahuas 447, Huaral – L.P: Dir: L. de la Lama B.
153) **R. Jauja,** Jirón Junin 901, Jauja – 154) **R. Interamericana,** Alfonso Ugarte 441, Chimbote, Ancash – L.P: Dir: N. Arias L – Ann: "La Voz del Pacífico desde Chimbote, Ancash".
155) **R. Nor-Peru** – L.P: Dir: J. Pacheco S.
156) **R. Sargento Lores,** Inspección General del Ejército, Iquitos.
157) **R. Abancay,** Abancay – 158) **R. Peru,** Jirón Trujillo 106, Chepén – L.P: Dir: I. Verástegui B – 159) **R. Toquepala,** Campamento de Empleados, Toquepala – 160) **R. Catacaos,** Ca. Comercio 590, Catacaos.
161) **R. Universal,** Ca. Real 578, Tambo – L.P: Dir: J. Pomalaza B.
162) **R. El Tiempo,** Ca. Santa Martha 310, Arequipa – L.P: Dir: T. Borja V.
163) **R. Internacional,** Av. 8 de Setiembre, Pisco – L.P: Dir: B. VillaC.
164) **R. Santa Rosa,** Camaná 170, Lima – Ann: "Para Ud. transmite R. Santa Rosa en su frecuencia de 1490kc onda larga" – 165) **R. Fessa,** Av. Oscar Benavides s/n, Cañete – 166) **R. Pacasmayo,** Junin 57, Pacasmayo – L.P: Dir: L. Gamero – Ann: "La Voz de la Provincia".
167) **R. La Nueva Voz del Centro,** Real Tambo 600, Tambo.
168) **R. San Pedro,** Av. 27 de Octubre, Mala – L.P: Dir: R. Pachas C.
169) **R. Surperuana,** Televisora Sur Peruana S.A, Arequipa.
170) **R. Sistema,** Jr. Ecuador, Cdra. 10 Av. Argentina, Lima.
171) **Universidad Nacional del Cuzco,** Cuzco.
172) **Prelatura Nullius,** Apt. 46, Sicuani – L.P: Dir: N. W. Hayes.

SURINAM

L.T: GMT – 3½ h – Pr.L: Dutch, Talkie, Hindustani.

RADIO APINTIE (Comm.)

ADDR: P.O. Box 1838, Paramaribo – Te: 5224. Cable: Fructomel.
STATION: 840kc 355m 1kW – HOME SCE. in Dutch, Talkie-Talkie, English, Hindustani, Javanese, Chinese: 08.00–03.30.
ANN: "R. Apintie, Paramaribo" – INT-SIG: The beat of the Apintie drum – V. by letter.

RADIO PARAMARIBO (Comm.)

ADDR: P.O. Box 975, Paramaribo. Te: 4131. Cable: Rapar – L.P: Dir. Gen: W. H. Lionarons.
STATION: 600kc 10kW – HOME SCE. in Dutch, Talkie-Talkie, English, Hindustani, Javanese, Chinese: 09.30–03.30 – ANN: "R. Paramaribo Rapar, de stem van Suriname, op de 500m of 600kc". English: "R. Paramaribo Rapar, the voice of Surinam, operating on a freq. of 500m or 6000kc".

URUGUAY

L.T: GMT –3 h – Pr.L: Spanish.

DIRECCION DE RADIOCOMUNICACIONES, Montevideo.
L.P: Dir: R. Buencristiano.

ASOCIACION NACIONAL DE BROADCASTERS URUGUAYOS (ANDEBU)

ADDR: Ca. Yi 1264, Montevideo. Cable: Andebu. Te: 84456 – L.P: Pres: Dr. J. Jimenez de Aréchaga. Secr: F. Raul Correa.

STATIONS: All st. pr. comm. exc. 7), 33), 34). *=inactive.

Short Waves: Call: CX—. Location: Montevideo exc. where indicated

	Call	kc	m	kW	Name & h of tr.
1)	A2	6000	50.00	5	R. Sur: 10.00–03.00
2)	A30	6035	49.71	1	R. Nacional: 15.00–03.00
3)	A61	6045[2]	49.63	1	El Espectador: 12.00–08.00
4)	A53	6055	49.55	5	La Voz de Melo, Melo: 10.00–03.00
5)	A3	6075	49.38	2.5	R. Ariel: 10.00–03.00
6)	A73	6115	49.06	1	R. Clarin: 11.00–02.00
7)	A4	6125	48.98	10	S.O.D.R.E.: 13.00–03.10
8)	A20	6140	48.86	10	R. Monte-Carlo: 10.00–03.00
9)	A13	6155[1]	48.74	10	R. Carve: 13.00–17.00, 21.00–02.00
10)	A21	6170	48.62	1	R. Fenix: 14.00–16.00, 21.00–01.00
11)	A71	9515	31.53	10	R. Sarandi: 15.00–22.00
8)	A72	9595	31.27	10	R. Monte-Carlo: 14.00–19.00
7)	A6	9620	31.19	20	S.O.D.R.E: 13.00–03.10
12)	A7	11735	25.56	5	R. Oriental: 10.00–04.00
3)	A19	11835[2]	25.35	5	El Espectador: 12.00–05.00
11)	A68	11885	25.24	10	R. Sarandi: 22.00–01.00
7)	A10	11900	25.21	20	S.O.D.R.E: 13.00–03.10
4)	A64	15225	19.70	25	La Voz de Melo
7)	A18	15270	19.65	1	S.O.D.R.E: 12.00–03.10
11)	A60	15385	19.49	10	R. Sarandi: 01.00–08.00

[1]=No-So. [2]=d.NoWe – SoEa.

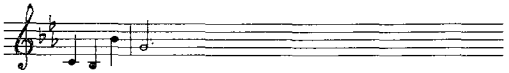
Medium Waves: °=Short Wave.

	Call	kc	kW		Call	kc	kW
13)	CW1	550	4.5	9)	CX16	°850	50
6)	CX58	°580	0.5	3)	CX18	°890	10/5
14)	CX4	610	5	8)	CX20	°930	10/5
7)	CX6	°650	50	17)	CX22	970	1.5
15)	CW27	680	1/0.25	9)	CX24	1010	2.5
11)	CX8	°690	10/5	7)	CX26	°1050	20
5)	CX10	°730	5/2.5	18)	CX28	1090	10/5
12)	CX12	°770	25	19)	CW31	1120	2/0.5
3)	CX14	°810	25	2)	CX30	°1130	10/5
16)	CW23	820	1/0.5	1)	CX32	°1170	10/5

	Call	kc	kW		Call	kc	kW
20)	CW33	1200	0.25	35)	CW46C	1460	0.03
21)	CX34	1210	2.5	36)	CX147	1470	1/0.5
22)	CW35	1240	2/1	37)	CW43B	1480	2
23)	CX36	1250	3.1	38)	CX48	1490	5
3)	CW37	°1260	1/0.25	39)	CW47B	1510	0.1
7)	CX38	°1290	1	40)	CX152	1520	2
24)	CW39	1320	0.5/0.1	41)	CX50	1530	1.2
25)	CW133	1330	0.25	42)	CX155	1550	0.25
10)	CX40	°1330	0.5	43)	CW51	1560	0.5
4)	CW53	°1340	2.5/1	40)	CV156	1560	0.7
26)	CW41	1360	0.5	44)	CW52	1570	0.25
27)	CX42	1370	2.5	45)	CV157	1570	0.1
28)	CW45	1390	1/0.5	46)	CX157	1570	0.1
29)	CX140	1400	10/5	47)	CW54	1580	0.5
30)	CX44	1410	5	48)	CV158	1580	0.1
31)	CW43	1420	1/0.5	49)	CX159	1590	0.25
32)	VW25	1430	1	50)	CW56	1600	0.25
33)	CX46	1450	5/2.5	51)	CV160	1600	0.1
34)	CW46B	1460	0.25	52)	CX160	1600	0.25

Short Waves:

1) Compañia Uruguaya de Publicidad S.A, Yi 1383, Montevideo – **L.P:** Dir: J.L.E. Amoroso – **D.Prgr:** CXA32 **R.Sur.**
2) O.R.O.S.A, Plaza Independencia 846, Montevideo. – **L.P:** Dir: L. Svirski – **D.Prgr:** CXA30 **R. Nacional** – **V.** by QSL-card.
3) Difusoras del Uruguay S.A, Soriano 1287, Montevideo. **Te:** 81481. **Cable:** Difuruguay – **L.P:** Dir. Gen: H. Amengual. Dir. Tec: R. Danilo V – **D.Prgr:** CX18 **R. Libertad Sport:** 13.00–06.00; CW37 ***Difusora Rochense,*** *Dr. Julián Graña, Rocha: 11.00–01.00 (Sat/Sun* 03.00) – **Ann:** "Trasmite CX14 EL Espectador, de Montevideo, Uruguay con sus ondas cortas CX17 19 y CXA61 en las bandas de 25 y 49m" – **Int.Sig:** Vibraphone.

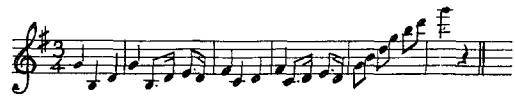


V. *by letter. Records accepted.*

4) Montevideo 721, Melo – **L.P:** Dir: R.D. Lucas – **D.Prgr:** CW53 11.00–03.00.
5) Olimar 1472, Montevideo – **L.P:** Dir: J.U. Pierri – **V.** by QSL-card.
6) Colonia 1487, Montevideo. **Te:** 405841 – **Fi:** By adv – **Ad:** every *15 min* – **L.P:** Dir: Ing. F.D. Tourreilles. *Dir. Tec:* G. Duarte – **D.Prgr: N:** 11.00, 13.00, 15.00, 17.00, 19.00, 21.00, 23.00, 01.00 – **Ann:** "Transmite CX58 CLARIN, 58 en su dial, y su onda corta CXA73 en la banda de 49 metros, República Oriental del Uruguay" – **V.** by letter.
7) Mercedes 823, Montevideo. **Cable:** Sodre – **L.P:** Dir: J. Zavala Carvalho. Dir. Tec: O.F. Chiappe – **D.Prgr:** On 650/9620/11900: 13.00–03.10. CXA38: 21.00–03.00 – **N:** 13.00, 15.00, 20.00, 24.00, 02.55 – **Ann:** "Servicio Oficial de Difusión Radio Electrica Montevideo con sus emisoras.." – **Int-Sig:** First movements of "Campo" – **V.** by QSL-card.
8) 18 de Julio 1224, 4° piso, Montevideo. Cable: Montecarlo – **L.P:** Dir. Gen: H. Romay S – **D.Prgr:** CXA20 930kc: 10.00–03.00.
9) Mercedes 973, Montevideo. **Cable:** Sadrep. **Te:** 84171 – **L.P:** Dir. Gen: R. Fontaina. Mgr: J.E. de Feo. Dir. Tec: A. Salvo – **D.Prgr:** 09.00–02.00 (mw) **N:** 10.00, 14.00, 15.00, 18.00, 19.00, 20.00, 21.00, 22.00, 23.00, 24.00, 01.30 – **Int-Sig:** Gong – **V.** by letter. Records accepted.
10) Rio Branco 1366, Montevideo – **L.P:** Dir: J.J. Rabassa – **D.Prgr:** CX40: 10.00–05.00 (Sat 06.00).
11) Corporación de Publicidad S.A, Enriqueta Compte y Rique 1282, Montevideo. **Te:** 28185 – **L.P:** Dir: M.A. Benia – **D.Prgr:** CX8: 08.00–03.00 – **N:** every h on the h – **V.** by letter.
12) Olimar 1364, Montevideo. **Te:** 81-483, -81484, 9-7412 – **L.P:** Dir. Gen: Dr. L.A. Artola. Dir. Tec: A. Razzetti – **D.Prgr:** 10.00–04.00. **N:** 14.00, 16.00, 20.00, 23.00, 24.00, 01.00, 02.30, 03.30. **Portuguese:** Mon through Fri 23.10 "Música Brasileña" – **Ann:** "Transmiten CX12 *y CXA7, emisoras de R. Oriental de Montevideo, Uruguay* – ***Int-Sig:*** Vibraphone or Xylophone – **V.** by QSL-card and letter.

Medium Waves:

13) **R. Colonia,** Alberto Mendez 164, Colonia.
14) **R. Rural,** 18 de Julio 1513, Montevideo – **L.P:** Dir: A.M. Lázaro – **D.Prgr:** 10.00–03.00(Sat & Sun 06.00) – **N:** every h on the h – **Int-Sig:**



15) **R. Tabaré,** Uruguay 678, Salto – **L.P:** Dir: J.M. Gestoso – **D.Prgr:** 10.00–03.00 – 16) **R. Cultural,** Lavalleja 42-48, Salto – **L.P:** Dir: Ramón J. Vinci – **D.Prgr:** 10.00(Sun 10.30)–03.00.
17) **R. Universal,** *Soriano 1217, Montevideo* – **L.P:** *Dir:* O. Porrás – **D.Prgr:** 10.00–03.00(Sat. 05.00).
18) **R. Imparcial,** Av. Algraciada 1708, Montevideo – **L.P:** Dir: W. Figueira M – **D.Prgr:** 24 h – **V.** by QSL-card.
19) **R. Salto,** Brasil 715, Salto – **L.P:** Dir: S. Pera – **D.Prgr:** 11.00–03.00 – **V.** by letter.
20) **Difusora Florida,** Gallinal 696, Florida – **L.P:** Dir: U.H. Acuna – **D.Prgr:** 13.00(Sun 12.30)–01.00 – 21) **R. Artigas,** Av. Millan 2370, Montevideo – **D.Prgr:** 12.30–02.30.
22) **R. Paysandú,** 18 de Julio 1044, Paysandú – **L.P:** Dir: A.M. Ordoqui – **D.Prgr:** 11.00–03.00 – 23) **Broadc. Centenario del Uruguay,** Olimar 1364, Montevideo – **V.** by letter.
24) **La Voz de Paysandú,** 18 de Julio 614, Paysandú – **L.P:** Dir: A.M. Penna – **D.Prgr:** 11.00–03.00 – 25) **La Voz de Artigas,** Artigas – **L.P:** Dir: L. Murillo M – 26) **Broadc. San José,** Treinta y Tres 890, San José – **D.Prgr:** 13.00–02.00.
27) **R. del Pueblo,** Mercedes 1805, Montevideo – **L.P:** Dir: R. Baz – **D.Prgr:** 11.15–03.00 – 28) **Difusora Treinta y Tres,** Pablo Zufriategui 230, Treinta y Tres – **L.P:** Dir: A. Pinto – **D.Prgr:** 10.50–03.00.
29) **R. Zorilla de San Martin,** 18 de Julio 304/10, Tacuarembó.
30) **R. Austral,** 18 de Julio 965, 2° piso, Montevideo – **L.P:** Dir: Raúl Beisso C – **D.Prgr:** 11.55(Sun 08.25)–02.00 – 31) **R. Lavalleja,** José E. Rodó 530, Minas – **L.P:** Dir: J.R. Volante – **D.Prgr:** 12.55–02.00.
32) **R. Durazno,** 18 de Julio 592, Durazno – **L.P:** Dir: R. Evangelisti – **D.Prgr:** 14.00–00.30 – 33) **R. América,** Plaza Independencia 846, Montevideo – **L.P:** Dir: M. Svirsky – **D.Prgr:** 13.00(Sun 12.00)–17.00, 19.00–01.00 – 34) **Liceo de Dolores,** Liceo de Dolores, Soriano.
35) **Liceo de San Carlos,** San Carlos, Maldonado – **D.Prgr:** 21.00–24.00.
36) **R. Montevideo,** Rio Branco 1366, Montevideo – **D.Prgr:** 11.00–02.00 – 37) **R. Internacional,** Sarandi 792, Rivera – **L.P:** Dir: W. Figueira M – **D.Prgr:** 09.00–03.00(Sat/Sun 24 h).
38) **R. Femenina,** 18 de Julio 1333,2° piso, Montevideo – **L.P:** Dir: Sara Vazquez – **D.Prgr:** 13.00–01.45.
39) **R. Berna,** Nueva Helvetia – **L.P:** Dir: M.A. Ravazzani – **D.Prgr:** 10.00–16.30, 18.00–23.00 – 40) **R. Cerro Largo,** Rio Branco 660, Melo.
41) **R. Independencia,** Paysandú 1186, Montevideo – **L.P:** Dir: A. Rupenián – **D.Prgr:** 08.00–03.00 – 42) **R. Carmelo,** 19 de Abril 444, Carmelo – **L.P:** Dir: U. Lobecio P – **D.Prgr:** 11.00–03.00.
43) **R. Maldonado,** Isla de Gorriti 819, Maldonado (or 18 de Julio 1561, Montevideo) – **L.P:** Dir: H. Lamaison – **D.Prgr:** 12.00–02.00.
44) **R. Litoral,** España 1157, Fray Bentos – **L.P:** Dir: G. Arizti – **D.Prgr:** 12.00–02.00.
45) R. Bella Union, Dept. Artigas – *L.P: Dir:* W. Othaix – ***D.Prgr:*** 11.00–03.00 – 46) **R. Canelones,** Canelones – **L.P:** Dir: W. Espiga – **D.Prgr:** 11.30–02.00 – 47) **Emisora del Este,** Domingo Pérez 491, Minas – **L.P:** Dir: C.R. Falco – **D.Prgr:** 10.30–02.00.
48) **R. Rivera,** Monseñor Vera 1132, River – **L.P:** Dir: D'Artagnán Pedezert – **D.Prgr:** 10.30–17.00, 20.00–00.30.
49) **Emisora Real de San Carlos,** Av. Gral. Flores 468, Colonia – **L.P:** Dir: Dr. E. Geimonart – **D.Prgr:** 10.00–03.00 – 50) **Difusora Soriano,** Florida 568, Mercedes – **L.P:** Dir: M.M. Racioppi – **D.Prgr:** 10.00–03.00 – 51) **R. Atlantica,** Parada 3, Punta del Este – **D.Prgr:** 11.30–03.00 – 52) **R. Rio Branco,** Rio Branco – **L.P:** Dir: R.D. Lucas.

VENEZUELA

L.T: GMT – 4 h – **Pr.L:** Spanish.

MINISTERIO DE COMMUNICACIONES – **ADDR:** Dirección de Telecomunicaciones, Division de Radiodifusión, Caracas.

CAMARA VENEZOLANA INDUSTRIA RADIO Y TELEVISION

ADDR: Apt. 3155, Caracas. **Cable:** Camradio. **Te:** 425805 – **L.P:** Pres: A. José Isturiz.

STATIONS: All st's comm. exc. 52) (Go.) and 5) (Educational).

Short Waves: Call: YV—.

	Call	kc	m	kW	Name	h of tr.
1)	PL	2340	128.4	1	R. Nueva Esparta, Porlamar	
2)	PH	2350	127.6	1	R. Gaurico, San Juan de los Morros	
3)	QG	2360	127.1	0.5	R. Carúpano	09.30–03.30
4)	QP	2370	126.1	1	R. Puerto La Cruz	
5)	PM	2430	123.5	1	Escuelas Radiofonicas, San Fernando	
6)	LG	2440	122.9	1	R. Girardot, Maracay	
7)	OX	2450	122.5	1	R. Los Llanos, Calabozo	
8)	NI	2470	121.5	1	R. Carorá	11.30–02.30
9)	PD	2480	120.9	1	La Voz del Avila, Caracas	
10)	SV	2490	120.5	1	R. Naiguata, Naiguata	
11)	KT	3245	92.45	1	R. Libartador, Caracas	
12)	QL	3255	92.15	1	La Voz del Tigre	11.30–03.30
13)	OC	3265	91.87	1	R. Nirgua	
14)	MC	3275	91.60	1	R. Mara, Maracaibo	10.30–03.03

	Call	kc	m	kW	Name	h of tr.
15)	LE	3285	91.32	1	R. Puerto Cabello	10.30–04.00
16)	OG	3295	91.10	1	R. Trujillo	11.00–02.30
17)	KX	3305	90.77	1	La Voz de la Patria, Caracas	10.30–03.30
18)	LI	3315	90.50	1	R. Maracay	11.30–03.30
19)	RA	3325	90.22	1	R. Monagas, Maturin	10.30–04.30
20)	QC	3335	89.95	1	Ecos del Orinoco, Ci.Bolivar	10.20–03.30
21)	PE	3345	89.68	1	R. Central, Maracay	
22)	LC	3355	89.41	1	R. Valencia	10.30–03.30
23)	PM	3365	89.15	1	R. Tovar, Tovar Mérida	10.25–02.30
24)	MI	3375	88.89	1	La Voz de la Fé, Maracaibo	10.30–03.30
25)	QI	3385	88.63	1	R. Barcelona	09.30–03.30
26)	OJ	3395	88.37	1	R. Universidad, Mérida	10.30–03.30
27)	KY	4760	63.03	1	Emisora Vargas, La Guaira	10.30–03.30
28)	NW	4770	62.89	1	Ondas del Caribe, Punto Fijo	11.30–03.30
29)	LA	4780	62.76	1	La Voz de Carabobo, Valencia	10.30–04.00
30)	QN	4790	62.63	5	Ondas Porteñas, Pto. La Cruz	10.30–03.30
31)	ME	4800	62.50	1	Ondas del Lago, Maracaibo	10.30–03.30
32)	MG	4810	62.37	1	R. Popular, Maracaibo	10.30–03.30
33)	RC	4820	62.24	1	La Voz de Apure, S. Fernando de Apure	11.30–02.30
34)	OA	4830	62.11	5	La Voz del Tachira	10.30–03.30
35)	OI	4840	61.98	1	R. Valera	11.30–03.30
36)	MS	4850	61.86	1	R. Universo, Barquisimeto	10.30–03.30
37)	NK	4860	61.75	1	R. Cronos, Barquisimeto	
38)	KP	4870	61.60	5	R. Tropical Caracas	
39)	KF	4880	61.48	5	Ondas Populares, Caracas	10.30–04.30
40)	KB	4890	61.35	5	R. Dif. Venezuela, Caracas	10.30–04.30
41)	QE	4900	61.22	1	R. Cumaná	10.30–03.30
42)	MK	4910	61.10	1	R. Cabimas	10.30–03.30
43)	KR	4920	60.99	7.5	R. Caracas	10.30–05.30
44)	OT	4930	60.85	1	R. Junin, S. Cristóbal	10.30–04.30
45)	MO	4940	60.73	1	R. Lara, Barquisimeto	10.30–03.30
46)	MM	4950	60.60	1	R. Coro	10.30–03.30
47)	QA	4960	60.48	1	R. Sucre, Cumaná	10.30–03.30
48)	LK	4970	60.36	10	R. Rumbos, Caracas	09.30–04.30
49)	OC	4980	60.25	1	Ecos del Torbes, S. Cristóbal	10.30–03.30
50)	MQ	4990	60.12	15	R. Barquisimeto	12.00–03.30
51)	RW	5010	59.88	1	R. Bocono, Bocono	
52)	KO	5020	59.76	10	R. Nacional, Caracas	
53)	KM	5030	59.64	7.5	R. Continente, Caracas	10.30–03.30
54)	MA	5040	59.55	1	Ecos del Zulia, Maracaibo	10.30–04.30
55)	KD	5050	59.41	2	R. Cultura, Caracas	10.30–03.30
56)	NL	6000	50.00	1	R. Miranda, Los Teques	
57)	PN	6110	49.10	10	Escuelas Radiofonicas, S. Fernando	
58)	TE	6130	48.94	1	R. Valles del Tuy, Ocuma del Tuy	
52)	KG	6170	48.62	10	T. Nacional, Caracas	10.30–04.30
50)	XJ	9510	31.55	15	R. Barquisimeto	10.30–04.30
°)	MX	9530	31.48	1	Various tr. Maracaibo	12.00–03.30
°°)	OM	9570	31.35	1	Various tr, S. Cristóbal	12.00–03.30
52)	SC	9640	31.12	10	R. Nacional, Caracas	
49)	PG	9640	31.12	2.5	Ecos del Torbes, S. Cristóbal	10.30–22.30

°)=Common freq. for 31), 32), 54), 67) – °°)=Common freq. for 34), 44).

Medium Waves: Call: YV—. °=Short Wave. [1]=also FM.

	Call	kc	kW		Call	kc	kW		Call	kc	kW
52)	SI	540	50	48)	KC	°790	5	70)	NZ	1030	10
52)	SJ	550	10	54)	MB	°800	20	20)	QD	°1030[1]	1
52)	KZ	550	1	62)	LP	810	10	71)	ON	1040	10
48)	LX	°560[1]	50	63)	SH	820	10	38)	RT	°1050	10
52)	SJ	570	50	56)	LT	°830	10	72)	LN	1060	1
24)	MJ	°580	10	37)	MY	°840	10	27)	KW	°1070	1
53)	KL	°590[1]	20	22)	LD	°850	10	73)	NG	1070	1
58)	SF	600	10	64)	QF	860	10	25)	QJ	°1080	10
59)	NO	610	10	44)	OL	°870	10	74)	PB	1090	1
60)	SE	620	10	11)	KU	°880	5	55)	KE	°1100	10
52)	KA	°630	10	65)	LW	890	10	75)	NN	1110	10
52)	SL	630	10	52)	SM	900		31)	MF	°1120	10
30)	QO	°650	10	37)	MP	°900	5/10	76)	NA	1130	1
6)	LH	°660	50	66)	RQ	910		51)	TD	°1130	1
48)	LL	°670[1]	10	1)	QX	°920	10	8)	MU	°1140[1]	1.5
50)	MR	°680	15	18)	LJ	°930	1	14)	MD	°1150	1
29)	LB	°690	1	3)	QB	°940	10	77)	SD	1160	10
32)	MH	°700	10	39)	KG	°950	5	78)	QV	1170	1
17)	KY	°710	5	19)	RB	°960	10	79)	OV	1180	1
41)	QR	°720	10	67)	ND	970	10	80)	OR	1180	10
36)	NT	°730	10	12)	MQ	°980	1	81)	RE	1190	1
61)	NC	740	10	21)	LR	°990	10	9)	OZ	°1200	10
43)	KS	°750	10	34)	OB	°1000	10	46)	MN	°1210	1
28)	MV	°760	10	68)	NM	1000	10	33)	RD	°1220	10
4)	QQ	°770	10	69)	PC	1010	1	82)	NT	1230	10
49)	OD	°780	10	47)	QT	°1020	10	35)	OH	°1230	1
83)	LQ	1240	1	87)	KE	1300	5	94)	QZ	1390	1
84)	NU	1250	1	88)	NS	1300	1	95)	NV	1410	1
42)	ML	°1250	1	89)	QY	1310	1	16)	OF	°1420	1
10)	SU	°1260	1	90)	OE	1320	1	96)	NJ	1430	1
85)	OU	1270	1	7)	OY	°1330	1	97)	FR	1440	1
86)	TR	1270	1	91)	QU	1340	1	26)	OK	°1450	1
13)	RY	°1280	1	92)	NH	1350	1	23)	OP	°1480	1
15)	LF	°1290	2	93)	LO	1370	1	5)	OW	°1490	1

Short Waves:

1) Porlamar – 2) San Juan de los Morros – 3) Carupano – 4) Puerto La Cruz – 5) San Fernando – 6) C.A.R. Girardot, Maracay – 7) Calabozo – **L.P:** Dir: M. O. Sosa C.

8) Ca. Bolivar 58, Carora, Estado Lara. **Te:** 1121 – **L.P:** Dir: C. J. Gonzalez – **D.Prgr:** 11.30–02.30. **N:** 11.30, 16.00, 23.30, 01.00 – **Ann:** "R. Carora YVMU 1140kc onda larga, YVNI 2470kc y YVMU/FM 102.3Mc frecuencia modulada y YVNI/FM 31.5Mc transmitiendo desde Carora, asiendo de la mejor ganaderia de Venezuela, Patria del El Libertador" – **Int-Sig:** Xylophone every 15 min's – **V.** by letter – **F.Pl:** 1140kc 10kW.

9) Caracas – 10) Naiguata – 11) Palma Miracielos, Edif. "Henry Clay", 2do piso, Caracas. **Te:** 41-49-73 – **L.P:** Dir. Gen: L. Raymondi Bello. Dir. Tec: H. Degwitz. Dir. English Prgr: C. Nash – **D.Prgr: N. in Spanish:** every half h. Special newscast W 16.00, 21.30 – **English:** 11.30–13.00, 23.00–23.30 – **Portuguese:** 17.30–18.00.

12) El Tigre (Anzóategui) – 13) Nirgua – **L.P:** Owner: F. Falkenagen.

14) Apt. 100, Maracaibo – **L.P:** Dir: L. A. Goveá.

15) Apt. 4, Pto. Cabello. **Te:** 33-88 – **L.P:** Dir. Gen: S. Guevara Villalba. Dir. Tec: P. J. Curvelo – **D.Prgr: N:** 11.00, 03.00 and short N every half h 10.30–04.30 – **Ann:** "Esta es R. Puerto Cabello, una emisora al servicio de su región del Circuito Nacional R.T. desde Puerto Cabello, Venezuela, Patria del Libertador y País Democrático de America" – **V.** by letter.

16) Ca. Independencia 200, Trujillo – **L.P:** Dir: P. J. Torres.

17) C.A. La Voz de la Patria, Caracas – **V.** by letter – 18) Maracay.

19) Apt. 14, Maturin. **Te:** 1001 – **L.P:** Dir. Tec: R. Phillips – **D.Prgr: N:** 11.30, 16.30, 23.00 – **Ann:** "R. Monagas, YVRB 960kc onda larga, YVRA 3325kc onda corta banda de 90 metros YVRB/FM 88.5Mc" – **V.** by letter. Re. in Sp, E.

20) Apt. 47, Ci. Bolivar. **Te:** 20413 – **L.P:** Dir. Gen: E. Bellorin A – **D.Prgr: N:** 11.30, 16.30, 23.00, 03.00(BBC). **Italian:** D 17.00–17.30. **Music USA** (ann. in English): D 21.00–21.30 – **Ann:** "Con el avance económico y cultural de la Guayana transmite Ecos del Orinoco un punto de amistas en su dial, Emisoras YVOC 1030kc onda larga, YVOD 3335kc onda corta en banda trópical de 90 metros y YVOC/FM... en Ci. Bolivar, Venezuela, Patria de El Libertador" – **V.** by letter with card – **Pub:** schedule free on request.

21) Maracay – 22) Valencia – **L.P:** Dir: M. Aché.

23) Cra. 4 No 5–48, Tovar – **D.Prgr: N:** 11.15, 16.35, 01.30 – **V.** by letter.

24) Ca. 64 No 3E–50, Maracaibo – **L.P:** Dir. Gen: O. Soto L. Dir. Tec: J. Marcano C – **D.Prgr: German:** Mo 00.30–01.30.

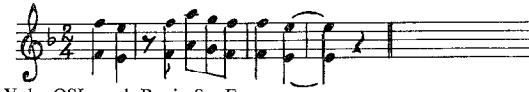
25) Apt. 27, Barcelona – **F.Pl:** YVQJ 10kW.

26) Apt. 74, Mérida – **D.Prgr: N:** 10.30, 16.00, 23.00, 01.30, 03.15 – **Ann:** "R. Universidad la Emisora de Merida" – **V.** by letter.

27) La Guaira – **L.P:** Dir: P. Sosa Gusmán – 28) Punto Fijo – **L.P:** Owner: A. J. Isturiz – 29) Valencia – **V.** by letter.

30) Apt. 4123, Puerto La Cruz. **Te:** 1033. **Cable:** Ondport – **L.P:** Dir. Gen: R. Bellorin M. Dir. Tec: R. Alfonzo – **D.Prgr: N:** 11.00, 16.00, 22.30, 01.00, 03.00 – **Ann:** "Transmite Ondas Porteñas y su Gran Circuito Nacional RT, desde Puerto La Cruz, Venezuela, Patria del Libertador y País Democrático de América" – **V.** by letter. Records accepted.

31) Apt. 261, Maracaibo. **Cable:** Lagonda. **Te:** 76261 – **L.P:** Pres: N. Vale Quintero. Dir. Tec: I. Salcedo – **D.Prgr: N:** W 12.00, 17.00, 02.30. Sun 17.30, 24.00 – **Ann:** "Desde Maracaibo, Venezuela Patria del Libertador, País Democrático, Transmite Ondas del Lago, Emisoras YVME 1120kc, YVMF 4800kc Onda corta" – **Int-Sig:**



V. by QSL-card. Re. in Sp, E.

32) Apt. 347, Maracaibo – **L.P:** Dir: J. Higuera M – **V.** by QSL-card.

33) Apt. 14, San Fernando Apure.

34) Apt. 37, San Cristóbal. **Te:** 11002 – **L.P:** Dir. Gen & Dir. Tec: J. M. Díaz González – **D.Prgr: N:** 10.30, 11.30, 17.00, 22.30, 00.50, 02.00, 03.15 – **Ann:** "La Voz del Tachira, YVOB 1000kc Onda Larga, YVOA 4830kc Onda Corta y YVOM 9750kc Banda Internacional de 31 mts; FM 88.3 y 98.3Mc por segundo, desde San Cristóbal, en Venezuela, Patria del Libertador y País Democrático de America" – **V.** by QSL-card or letter. Re. in Sp, E.

35) Ca. Bolivar 54, Valera – **L.P:** Dir: J. Ferbes J – 36) Apt. 567, Barquisimeto **V.** by letter – 37) Barquisimeto.

38) San Jacinto 9, Caracas – **D.Prgr:** N: every 20 min's – **Ann:** "En cualquier sitio R. Tropical y su gran Circuito Nacional R.C" – V. by QSL-card.
39) Edif. R. Centro, Apt. 2057, Caracas. **Te:** 418971 – V. by QSL-card.
40) Cipreses a Miracielos 1, Caracas – **Ann:** "Radiodif. Venezuela – máxima en potencia y calidad – transmitiendo desde Caracas, Venezuela, cuna del Libertador".
41) Cumaná – **L.P:** Dir. Gen: A. J. Isturiz.
42) Ca. Democracia, Cabimas – V. by letter.
43) Coraven C.A, Barcenas a Rio, Caracas. **Cable:** Coraven. **Te:** 418971 – **L.P:** Dir. Gen: A. Espina – **D.Prgr:** N: Every half h from 11.30 to 03.00 – **Ann:** "R. Caracas" – V. by QSL-card or letter.
44) Apt. 220, San Cristóbal – **L.P:** Dir: P. Vivas Arellano.
45) Apt. 76, Barquisimeto – **L.P:** Dir. Prgr: P. R. Calderon – V. by letter.
46) Comercio y Monzón 77, Coro – **L.P:** Dir. Gen: R. Leyba. Dir. Tec: V. J. Róca – **D.Prgr:** N: 12.30, 16.30, 23.30 – **Folklore Music:** 10.30, 17.00 – **Int-Sig:** Opens and closes with the march "Los Tres Colores" and the Nat. Anthem – V. by letter.
47) Apt. 26, Cumaná – V. by letter.
48) Apt. 2618, Caracas. **Te:** 415963 – **L.P:** Dir. Gen: N. Colmenares. Dir. Tec: A. Gulbis – **D.Prgr:** N: 10.00, 12.00, 16.00, 17.00, 03.30, 04.00 – **Ann:** "Transmite R. Rumbos, La Emisora de Venezuela, Cadena Nacional..." – **Int-Sig:** Gong – V. by QSL-card or letter. St's transmitting in chain with R. Rumbos: 3), 25), 47), 75).
49) Apt. 152, San Cristóbal – **L.P:** Dir: G. Gonzales L. Dir. Tec: E. Marques – **D.Prgr:** On 780/4980kc/FM: 10.30–03.30. On 9640kc: 10.30–22.30. N: 11.00, 16.30, 18.20, 19.30, 22.30, 00.30, 03.15 – **Ann:** "Desde San Cristóbal, Venezuela Patria del Libertador, transmite Ecos del Torbes, su Emisora Predilecta, Estaciones YVOC 4980kc onda corta, 780kc onda larga y YVPG 9640kc banda internacional de 31 metros" – V. by letter. Records accepted – **F.PI:** 10kW on 4980kc.
50) Apt. 576, Barquisimeto – V. by QSL-card – 51) Bocono.
52) P.O. Box 3979, Caracas. **Te:** 720661 – **L.P:** Dir. Gen: Dr. A. Pizani P. Dir. Tec: L. Linares C. Dir. Eng. Prgrs: G. Artiles – **D.Prgr:** YVKZ: 12.30–04.30 – 540kc Maracaibo, 550kc Porlamar, 570kc Ciudad Bolivar, 630kc (KA=Caracas, SL=San Cristóbal), 900kc Mérida – V. by QSL-card.
53) Apt. 866, Caracas. **Cable:** Continente. **Te:** 543411 – **L.P:** Pres: C. W. White. Dir. Tec: A. Espino Baez – **D.Prgr:** N: 11.00, 16.00, 22.30 – **Ann:** "Trasmite R. Continente Circuito Nacional primera en hogares YVKL 590kc, YVKM 5030kc, banda de 60 metros, desde Caracas, Cuna del Libertador, y capital de Venezuela, país democrático de América" V. by letter. Re. in Sp, E. Records accepted.
54) Apt. 37, Maracaibo. **Cable:** Ecozulia – **L.P:** Gen. Mgr: A. Baralt L – V. by QSL-card.
55) Apt. 1931, Caracas. **Te:** 410976 – **L.P:** Dir. Gen: I. Neri – **D.Prgr:** N: 10.45, 16.30, 22.30 – **Italian:** 01.30–03.30 – **Ann:** "En el año... de nuestra independencia, desde Caracas, Venezuela, Cuna de El Libertador, transmite R. Cultura..." – V. by QSL-card – **F.PI:** 20kW tr.
56) Los Teques – **L.P:** Dir: A. Landeata – 57) see 5).

Medium Waves:
58) **R. Piar,** Caripito – 59) **R. Libertad,** Cabimas – 60) **R. Cristal,** Barquisimeto – 61) **R. Mundo,** Maracaibo – 62) **R. 810,** Valencia – 63) **R. Guayami,** Unica – 64) **R. Bolivar,** Ci. Bolivar – 65) **R. America,** Valencia – **L.P:** Dir: P. Bernardo Heredia – 66) **R. Aeropuerto,** Maiguetia – 67) **R. Catatumbo,** Maracaibo – 68) **R. Morón,** Morón – 69) **R. Aragua,** Cagua – 70) **R. Calendario,** P.O. Box 789, Maracaibo – 71) **R. Los Andes,** Mérida – 72) **R. Guarico,** San Juan de los Morros – 73) **R. Lagunillas,** Lagunillas – 74) **R. Yaracuy,** 4a Av. 123, San Felipe. **Te:** 1056 – **L.P:** Dir: F. Falkenhagen – **D.Prgr:** 11.30–02.30.
75) **R. Punto Fijo,** Ca. Ecuador, Altos, Edif. Rofer, Punto Fijo – **D.Prgr:** 10.30–04.30 – 76) **Ondas de los Médanos,** Coro – 77) **R. Turismo,** Valera – 78) **R. Acarigua,** Acarigua – 79) **R. Perijá,** Machiques – 80) **R. Maturin** – 81) **R. Barinas,** Barinas – 82) **R. Barlavento,** Caucagua – 83) **La Voz dela Victoria,** La Victoria – **L.P:** Dir: R. M. Marin.
84) **R. Caroni,** San Felix – 85) **Ondas Panamericanas,** El Vigia.
86) **R. Tucupita,** Tucupita – 87) **R. Crono Radar,** Av. General Paéz, El Paraiso, Caracas – 88) **R. Reloj,** Maracaibo – 89) **R. Guanara,** Guanara.
90) **R. San Cristóbal,** Apt. 374, San Cristóbal. **Te:** 14300. **Cable:** Radiostobal – **D.Prgr:** N: W 12.20, 14.45, 15.50, 17.30, 19.30, 21.30, 00.15 – **Ann:** "Estaciones YVOE 1320kc y YVOM, Banda Internacional de 31m, transmitiendo desde San Cristóbal, Venezuela, Patria del Libertador, país democrático de América" – V. by letter. Records accepted.
91) **R. San Carlos'** San Carlos – 92) **Ondas del Escalante,** Santa Bárbara del Zulia – 93) **R.dif. La Pascua,** Ca. Real 17, Valle de La Pascua.
94) **La Voz de Anaco,** Anaco – 95) **R.dif. Oriental,** Güria – 96) **R. Progreso,** Bachaquero – 97) **R. Orituco'** Altagracia de Orituco.

Continental Electronics, USA: delivered mw-tr's: YVKL 10kW, YVLL 2×10kW, R. America 10kW, R. Rumbos 10kW; 1×10kW sw-tr. to YVKX.
The Marconi Company Ltd, G.B: delivered sound tr's: 1×2, 1×20 kW (R. Continente), 1×10kW (R. Libertador).

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RELIGIOUS BROADCAST. ORGANIZATIONS

(Continued from page 42).

PLANNED STATIONS
EPI: Emetteur Protestant International (international evangelical radio station) P.O. Box 1374 – 3000 Bern, Switzerland, TX: 1 sw.st. with 2×250kW tr's planned. L: Prgr's in 17 languages planned. – Org: Federation of Swiss protestant Churches and the EPI Association.
South East Asia Radio Voice serving corporating Asian Christian Councils. 50kW tr. located in Dumaguete City, Philippines – Ag. Exec. Dir: Rev. Thomas W. Lung, Room 401, 191 Prince Edward Rd, Kowloon, Hong Kong.
Trans World Radio: See under Monaco (F.PI).

THE DANISH SHORT WAVE CLUB INTERNATIONAL, P. O. Box 6, Nørresundby, Denmark, publishes »SHORTWAVE NEWS«-(intern) and »KORTBØLGENYT« for Scandinavia (excl. July). Membership fee per year: 15 D. Kr., $ 2.25, £ 0/16/0, 25 IRC. Payment to K. H. Høilund, Tyge Brahesvej 47, Aalborg, Denmark. Postgiro:103 409.

SVERIGES RADIOKLUBB. (SRK) founded 1944. It is the club for you! You will receive our printed journal "DX-Radio" 11 times a year and a complete list of s.w.-stations featuring a unique time-schedule. Join the SRK! Annual membership fee is: Sw.Crs. 13.50, 2.60 US $, sh 18/6 d. SRK, Box 5083, Stockholm 5, Sweden.

LAST MINUTE INFORMATION

ANGOLA: Emissora Oficial de Angola: Portuguese 06.00–09.00 (Sun 10.00) on 872/1295/6025/6195/7235kc, 10.00–11.00 on 1295/7235/9765kc (Sun also on 872kc), 11.00–17.10 on 1295/6195/7235/9765kc, 17.10–17.55 on 872/1295/6195kc, 17.55–24.00 on 872/1295/6025/6195/7235kc – **French:** 10.15–10.55 on 6195/9700kc, 11.15–11.55 on 6195kc – **English:** 17.15–17.55 on 7235/9765kc.
R. Clube do Cuanza-Sul: Amend 4788 to 4838kc – **R. Clube de Malanje:** Amend 4965 to 4937kc.
BOLIVIA: Numerous stations operating are not under control of the government.
BRAZIL: 65) ZYV32 09.00–02.30.
CANARY ISLANDS: RNE, Tenerife: 50kW sw-tr. testing on 9600kc.
CEYLON: R. Ceylon: LP: Asst. Dir. Gen: V. Pandítha. Chief Eng: N.S. Wickremasinghe. Dir. Nat. Sce: K.H.J. Wijedasa. Dir. Comm Sce: L.R. Wijemanne (Acting).
CHILE: Medium Waves: CD120 R. SNA, Cas 327, Los Angeles; CB121 1kW R. Universidad Tecnica del Estado, Av. Ecuador 3469, Santiago; CD125 R. Univ. Tecnica del Estado, Valdivia; CD133 R. Vicente Perez Rosales, San Felipe 80, Pto. Montt; CA134 R. Toco Tocopilla; CC136 R. Univ. de Concepción, Concepción; CB142 R. Nacional, Sto. Domingo 458, Santiago; CC142 R. Maule, Chacabuco; CB145 R. Univ. Santa Maria, Cas. 110V, Valparaiso; CA146 R. An-

Continued page 278

WORLD TELEVISION

The principal CCIR* television systems:
Definition refers to the standard which is normally stated in terms of the number of lines which make up the image. Reference in the following surveys is made throughout merely to 405 lines, 525 lines, 625 lines, 625 lines (OIRT**) and 819 lines respectively.

Number of lines per picture	405	525	625	819
Video bandwidth (Mc/s)	3	4	5	10.4
Channelwidth (Mc/s)	5	6	7	14
Sound carrier relative to vision carrier	−3.5	+4.5	+5.5	±11.15
Sound carrier relative to edge of channel	+0.25	−0.25	−0.25	+0.10
Interlace	2/1	2/1	2/1	2/1
Line frequency (c/s)	10.125	15.750	15.625	20.475
Field frequency (c/s)	50	60	50	50
Picture frequency (c/s)	25	30	25	25
Sense of vision modulation	Positive	Negative	Negative	Positive
Level of black as percentage of peak carrier	30	75	75	25
Sound modulation	AM	FM	FM	AM

* The International Radio Consultative Committee.
**The characteristics are the same as 625 lines exc. for a difference in bandwidth: video bandwidth 6Mc, channelwidth 8Mc, sound carrier relative to vision carrier +6.5Mc.

The following pages give you the data for the different TV stations of the world. The channel is indicated by a letter followed by a figure. The letter indicates the technical data of the systems which are in use (A: American, B: British etc.) and the figure is the channel number.

The power for vision and sound are indicated by a fraction, the numerator indicating the number of kW (ERP) for vision and the denominator for sound, for example 6/1.5 means vision 6kW ERP and sound 1.5kW ERP.

Differences in Belgian TV from resp. CCIR 625 and French 819:	CCIR 625	Belgian 625	French 819	Belgian 819
Video bandwidth (Mc)			10.4	5
Channelwidth (Mc)			14	7
Sound relative to vision			−11.15	+5.5
Sound relative to edge of ch.			+0.10	−0.25
Vision modulation	Negative	Positive		
Level of black as percentage of peak carrier	75	25		
Sound modulation	FM	AM		

United States of America. Number of lines: 525.

ch	Mc/s	ch	Mc/s	ch	Mc/s
A-2	55.25/ 59.75	A-28	555.25/559.75	A-56	723.25/727.75
A-3	61.25/ 65.75	A-29	561.25/565.75	A-57	729.25/733.75
A-4	67.25/ 71.75	A-30	567.25/571.75	A-58	735.25/739.75
A-5	77.25/ 81.75	A-31	573.25/577.75	A-59	741.25/745.75
A-6	83.25/ 87.75	A-32	579.25/583.75	A-60	747.25/751.75
A-7	175.25/179.75	A-33	585.25/589.75	A-61	753.25/757.75
A-8	181.25/185.75	A-34	591.25/595.75	A-62	759.25/763.75
A-9	187.25/191.75	A-35	597.25/601.75	A-63	765.25/769.75
A-10	193.25/197.75	A-36	603.25/607.75	A-64	771.25/775.75
A-11	199.25/203.75	A-37	609.25/613.75	A-65	777.25/781.75
A-12	205.25/209.75	A-38	615.25/619.75	A-66	783.25/787.75
A-13	211.25/215.75	A-39	621.25/625.75	A-67	789.25/793.75
		A-40	627.25/631.75	A-68	795.25/799.75
UHF Channels		A-41	633.25/637.75	A-69	801.25/805.75
A-14	471.25/475.75	A-42	639.25/643.75	A-70	807.25/811.75
A-15	477.25/481.75	A-43	645.25/649.75	A-71	813.25/817.75
A-16	483.25/487.75	A-44	651.25/655.75	A-72	819.25/823.75
A-17	489.25/493.75	A-45	657.25/661.75	A-73	825.25/829.75
A-18	495.25/499.75	A-46	663.25/667.75	A-74	831.25/835.75
A-19	501.25/505.75	A-47	669.25/673.75	A-75	837.25/841.75
A-20	507.25/511.75	A-48	675.25/679.75	A-76	843.25/847.75
A-21	513.25/517.75	A-49	681.25/685.75	A-77	849.25/853.75
A-22	519.25/523.75	A-50	687.25/691.75	A-78	855.25/859.75
A-23	525.25/529.75	A-51	693.25/697.75	A-79	861.25/865.75
A-24	531.25/535.75	A-52	699.25/703.75	A-80	867.25/871.75
A-25	537.25/541.75	A-53	705.25/709.75	A-81	873.25/877.75
A-26	543.25/547.75	A-54	711.25/715.75	A-82	879.25/883.75
A-27	549.25/553.75	A-55	717.25/721.75	A-83	885.25/889.75

United Kingdom and Ireland. Number of lines: U.K. 405, Ireland 625, partly 405.

ch	Mc/s	ch	Mc/s		Ireland (partly
B-1	45.00/ 41.50	B-8	189.75/186.25		
B-2	51.75/ 48.25	B-9	194.75/191.25	ch	625 lines)
B-3	56.75/ 53.25	B-10	199.75/196.25	IB	53.75/ 59.75
B-4	61.75/ 58.25	B-11	204.75/201.25	ID	175.25/181.25
B-5	66.75/ 63.25	B-12	209.75/206.25	IF	191.25/197.25
B-6	179.75/176.25	B-13	214.75/211.25	IH	207.25/213.25
B-7	184.75/181.25	B-14	219.75/216.25	IJ	215.25/221.25

Continental Europe (excl. France, Monaco, Italy and OIRT members). Number of lines: 625.

ch	Mc/s	ch	Mc/s	ch	Mc/s
E-2	48.25/ 53.75	E-5	175.25/180.75	E-9	203.25/208.75
E-2A	49.75/ 55.25	E-6	182.25/187.75	E-10	210.25/215.75
E-3	55.25/ 60.75	E-7	189.25/194.75	E-11	217.25/222.75
E-4	62.25/ 67.75	E-8	196.25/201.75	E-12	224.75/229.75

France, Monaco. Number of lines: 819.

ch	Mc/s	ch	Mc/s	ch	Mc/s
F-2	52.40/ 41.25	F-7	177.15/188.30	F-10	159.70/188.55
F-4	65.55/ 54.40	F-8A	185.25/174.10	F-11	203.45/214.60
F-5	164.00/175.15	F-8	186.55/175.40	F-12	212.85/201.70
F-6	173.40/162.25	F-9	190.30/201.45		

Italy. Number of lines: 625.

ch	Mc/s	ch	Mc/s	ch	Mc/s
A	53.75/ 59.25	D	175.25/180.75	G	201.25/206.75
B	62.25/ 67.75	E	183.75/189.25	H	210.25/215.75
C	82.25/ 87.75	F	192.25/197.75	H1	217.25/222.75

USSR and OIRT members (R). Number of lines: 625. Channel width: 8 Mc. Video bandwidth 6 Mc.

ch	Mc/s	ch	Mc/s	ch	Mc/s
I	49.75/ 56.25	V	93.25/ 99.75	IX	199.25/205.75
II	59.25/ 65.75	VI	175.25/181.75	X	207.25/213.75
III	77.25/ 83.75	VII	183.25/189.75	XI	215.25/221.75
IV	85.25/ 91.75	VIII	191.25/197.75	XII	223.25/229.75

New Zealand (NZ). Number of lines: 625.

ch	Mc/s	ch	Mc/s	ch	Mc/s
1	45.25/ 50.75	4	175.25/180.75	7	196.25/201.75
2	55.25/ 60.75	5	182.25/187.75	8	203.25/208.75
3	62.25/ 67.75	6	189.25/194.75	9	210.25/215.75

Australia. Number of lines: 625.

ch	Mc/s	ch	Mc/s	ch	Mc/s
0	46.25/ 51.75	5	102.25/107.75	8	189.25/194.75
1	57.25/ 62.75	5A	138.25/143.75	9	196.25/201.75
2	64.25/ 69.75	6	175.25/180.75	10	209.25/214.75
3	86.25/ 91.75	7	182.25/187.75	11	216.25/221.75
4	95.25/100.75				

Japan. Numbers of lines: 525.

ch	Mc/s	ch	Mc/s	ch	Mc/s
J-1	91.25/ 95.75	J-5	177.25/181.75	J-9	199.25/203.75
J-2	97.25/101.75	J-6	183.25/187.75	J-10	205.25/209.75
J-3	103.25/107.75	J-7	189.25/193.75	J-11	211.25/215.75
J-4	171.25/175.75	J-8	193.25/197.75	J-12	217.25/221.75

UHF channels 46–63 see USA. ch 13–45, 64–82 not in use.

Television on VHF/UHF (Band IV/V) Europe and Africa.
VHF/UHF television systems for Band IV/V adopted by the European Broadcasting Conference Stockholm 1961 and by the African Broadcasting Conference, Geneva 1963 are 625-lines systems only. These can be grouped into 5 categories, here called Standards G to L:

Standard	Video Band-width (Mc)	Picture/ Sound Separation (Mc)	Vestigial Sideband (Mc)	Picture modulation	Sound modulation	Frequency of chrominance subcarrier (Mc)	Power ratio picture/ sound
G	5	5.5	0.75	Neg	FM	4.43	5:1
H	5	5.5	1.25	Neg	FM	4.43	5:1
I	5.5	6	1.25	Neg	FM	4.43	5:1
K	6	6.5	0.75	Neg	FM	4.43	5:1
L	6	6.5	1.25	Pos	AM	4.43	8:1

ch	Vision Mc/s	ch	Vision Mc/s	ch	Vision Mc/s	ch	Vision Mc/s
21	471.25	33	567.25	45	663.25	57	759.25
22	479.25	34	575.25	46	671.25	58	767.25
23	487.25	35	583.25	47	679.25	59	775.25
24	495.25	36	591.25	48	687.25	60	783.25
25	503.25	37	599.25	49	695.25	61	791.25
26	511.25	38	607.25	50	703.25	62	799.25
27	519.25	39	615.25	51	711.25	63	807.25
28	527.25	40	623.25	52	719.25	64	815.25
29	535.25	41	631.25	53	727.25	65	823.25
30	543.25	42	639.25	54	735.25	66	831.25
31	551.25	43	647.25	55	743.25	67	839.25
32	559.25	44	655.25	56	751.25	68	847.25

The sound carrier frequency for each channel can be determined by adding the appropriate figure to the vision carrier frequency given above (5.5Mc for systems G, H; 6Mc for system I and 6.5Mc for systems K, L). In We. Germany is ch. 38 reserved for aero-navigation

ALBANIA

RADIODIFFUSION TELEVISION ALBANAISE

Addr. & L.P: See radio.
Station: chR2 0.02kW – Exp. transmissions three times per week at 18.00–21.00.

AUSTRIA

ÖSTERREICHISCHER RUNDFUNK (Gesellschaft m.b.H.)

Fi: By license payments, adv – **Ad:** W 18.30, 18.55, 19.20 – **Addr:** Television Dept, Schellinggasse 4, Wien I. **Cable:** Fernsehen. **Te:** 523627 – **Studios:** Maxingstr. 13a, Wien XIII; Singrienergasse 21, Wien XII; Columbia-studio, Rothgasse 9, Wien I – **L.P:** Dir. Gen: J. Scheidl. Dir. TV: G. Freund. Vice Dir. Gen: Ing. W. Füchsl.

Stations:	ch	kW(W)		ch	kW(W)
Jauerling	E2	60/12H	Koralpe	E8	50/10W
Veitsch	E3	10/2W	Tröschberg	E8	30/6W
Patscherkofel	E4	60/12H	Freinberg[1]	E9	30/6W
Goldbichl	E4	150/30W	Mugl	E9	20/4
Kirchenberg	E5	0.2/0.04W	Augerwald	E9	3/0.6W
Höfener Alm	E5	20/5W	Himmelhaf I	E9	20/4W
Kahlenberg	E5	60/12H	Innsbruck	E9	100/20W
Pfänder	E5	80/16H	Sonnwendstein	E10	5/1
Schladming[1]	E5	0.1/0.02W	Pyramidenkogel	E10	30/6
Schlossberg[1]	E5	*1/0.2W*	*Hahnbaum*[1]	*E10*	*0.1/0.02*
Schmittenhöhe[1]	E6	0.05/0.01	Flühen[1]	E10	0.3/0.06W
Gschwandkopf	E6	0.1/0.02	Grünberg[1]	E11	5/1W
Heuberg[1]	E6	0.08/0.016	Penzenstein[1]	E11	50/10W
Kanzel	E6	0.5/0.1W	Polster	E11	10/2W
Lichtenberg	E6	100/20H	H. Kaibling	E11	10/2
Lorenzenberg[1]	E6	10/2W	Golm	E11	0.2/0.04W
Dobratsch	E6	20/4W	Grosseck	E11	0.3/0.06W
Schöckl	E7	60/12H	Ziehberg	E11	10/2W
Hartberg[1]	E7	30/6W	Baumgarten[1]	E12	10/2W
Ebenfeld	E7	10/2W	Goldeck[1]	E12	160/80W
Königsberg[1]	E7	10/2W	Hohe Salve	E12	30/6W
Gaisberg	E8	60/12	Feldkirch	E12	0.1/0.02kW
Hierflau	E8	0.5/0.1W	Schöckl II*	E23	20/4kW
Griesfeld[1]	E8	3/0.6W	Kahlenberg II	E24	400/80
Mitterberg	E8	0.4/0.08W	[1] = Frequency-changer.		

D.Prgr: Sun, Wed 16.00–21.30 (approx), other days: 18.00–21.30 (approx) – * Tec. Testprgr's: Tues, Fri, Sat 18.00–20.30.

AKG, Austria: delivered studio equip. (recorders, microphones). Ampex Videotape, USA – Telefunken AG, Germany: delivered 10kW tr's (Jauerling, Pfänder), 2kW tr. (Pyramidenkogel); studio equip. (recorders, microphones).

BELGIUM

RADIODIFFUSION-TELEVISION BELGE (RTB) – BELGISCHE RADIO EN TELEVISIE (BRT) (Go.)

FI: By state grant-in-aids – **Addr:** RTB or BRT, Place Eugène Flagey 18, Brussels 5. **Cable:** RTB or BRT-TV. **Te:** French 49.20.80. Flemish 48.64.30 – **L.P:** French Prgr: Dir: L.P. Kammans. Flemish Prgr: Dir: B. Janssens. For Rel: Dir: L. Wallenborn.

French Prgr: Def. 819

	ch	E	kW	
Ougrée	3		100/25	H
Couvin (exp).	4		10/2.5	H*
Stavelot	5		15/3.75	V*
Wavre	8		100/25	H
Anlier	11		10/2.5	H
Bruxelles	7		5/1.25W	V*
Anseremme	5		10/2.5W	V*
Bouillon	9		10/2.5W	V*

Flemish Prgr: Def. 625

	ch	E	kW	
Wavre	10		100/25	H
Aalter	2		100/25	H
Antwerp	2		100/25W	V*
Bruxelles	11		5/1.25W	V*

* Satellite tr's.
D.Prgr: French Prgr: W 17.30–23.30. Sun 14.00–17.45, 19.30–23.30. **School prgr:** Mon, Tues, Thurs, Fri 13.15–14.00.
Flemish Prgr: 18.00–21.45(or 22.00) **School prgr:** Mon, Tues; Thurs 13.05–14.00.

Ampex Videotape, USA – The Marconi Company Ltd, GB, delivered OBV – Pye TVT, GB: studio equip, OBV for Eurovision switching centre. – Wilh. Franz KG, Germany: EMT studio equip.

BULGARIA

BULGARIAN TELEVISION (Go.)

Addr: Todor Strastimirov St. 2, Sofia. **Cable:** Tvbulgar. **Te:** 4-33-11. **L.P:** Dir. Gen: N. Ganchovski. Mgr: V. Baev. Dir. Tec: N. Stanev. **Station:** Sofia chR7 10/5kW.
D.Prgr: Mon, Wed, Fri, Sat 16.00–20.30, Sun 15.00–20.30.
Pye T.V.T, G.B: Tr, ant, studio equip, OBV.

CZECHOSLOVAKIA

CESKOSLOVENSKA TELEVIZE

Ad: Approx. 20 min. weekly – **Fee:** 180 Czech. crowns. – **Addr:** Ceskoslovenská televize, nám. M. Gorkého 29, Praha 1. **Cable:** Televize. **Te:** 221247. Telex: 0400 – **L.P:** Dir. Gen: J. Pelikán. Dir. Tec: F. Svejkovsky. Dir. For. Rel: L. Kubicek. Dir. Prgr: Z. Nováč. Film Buyer: Mrs. M. Schafferová.
Stations: Ch. OIRT. Polarisation: H.

Praha	ch	kW	Ostrava	ch	kW	
Stredny Cechy	1	30/6	H	Severni Morava	1	10/2	H
Severni Cechy	12	*8/1.6*	V	***Bratislava***			
Zàpadni Cechy	10	10/2	H	Zàpadni Slovensko	2	10/2	H
Jizni Cechy	2	10/2	H	Stredni Slovensko	7	10/2	H
Vychodni Cechy	6	10/2	H	Vychodni Slovensko	6	10/2	V
Brno							
Jizni Morava	9	10/2	H				

D.Prgr: *Mon 16.30–21.30*, Tues 08.00–10.30, 17.00–22.00, Wed 07.00–11.00, 14.00–22.00, Thurs 08.00–11.00, 15.30–22.00, Fri 08.00–11.00, 16.30–22.00, Sat 08.00–11.00, 14.00–22.30, Sun 08.30–12.00, 13.00–21.30.

DENMARK

RADIO DENMARK

Fi: By license payments – **Fee:** D. Kr. 140.–.
Addr: Television Service, R. Denmark, Radiohouse, Rosenørnsalle 22, Copenhagen V. **Cable:** Danradio. **Te:** 350647 – **L.P:** see radio – **Stations:** Ch. E, Po. H, exc. those marked * V.

	ch	kW		ch	kW		ch	kW
Funen	3	10/3	Vejle*	5	0.05	Frederikshavn*	8	0.05
Copenhagen	4	10/3	So. Seeland	6	60/20	Kolding*	9	0.1
Ålborg	5	10/3	So. Jutland	7	60/20	We. Jutland	10	60/2
Bornholm	5	10/3	Århus	8	10/3			

D.Prgr: 18.30–22.00, Childrens Hour: Mon, Tues 18.00–18.30; Thurs, Fri, Sat 16.00–16.30 – Test tr's normally at the following times, if no regular prgr's: Mon–Fri 08.00–09.00, 12.30–16.30(Wed 15.00), *Sat 08.00–14.00.*

The Marconi Company Ltd, GB: Tr's: 1/0.25kW (Ålborg), 2.5/0.625 kW (Århus), 1.5/0.3kW (Bornholm), 5kW (Copenhagen), 5/1.25kW (Odense), 5/1.25kW (Bornholm), 5kW (Copenhagen), 5/1.25kW (Odense), 5/1.25kW (Funen), 4/1kW (Næstved), 4/1kW (We. Jutland) – AKG, Austria: delivered studio equip. (recorders, microphones) – *Ampex Videotape, USA – Pye T.V.T, GB: Studio equip. OBV.*

FINLAND

OY. YLEISRADIO AB. (Suomen Televisio) – (Go.)

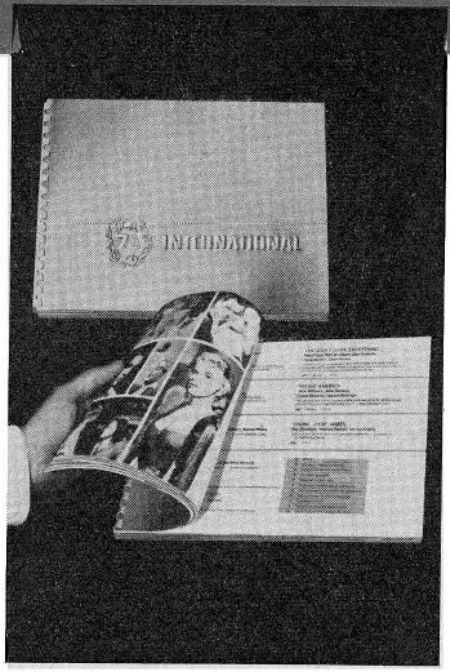
Fi: By license fees and rental income (see Oy. Mainos-TV. Reklam Ab. below) – **Addr:** Pasila, Ilmala, Helsinki. **Cable:** Yleisradio. **Te:** 413355. **Telex:** 12.849 – **L.P:** See radio.

Station	ch	kW/W	Po.	Station	ch	kW/W	Po.
Hanko	11	8W	V	Lohja	11	5W	H
Helsinki	6	10	H	Loviisa	11	10W	H
Helsinki UHF	24	25	H	Mikkeli	6	10	V
Hämeenlinna	5	5W	H	Mänttä	7	5W	V
Iisalmi	5	200W	V	Oulu	7	60	V
Joensuu	11	1W	H	Pirttikoski	5	5W	H
Joutseno	10	10	H	Pori	9	200W	H
Jyväskylä	11	10	H	Porvoo	11	2W	H
Kajaani	4	15	H	Rauma	5	200W	H
Karhula	5	400W	V	Riihimäki	11	5W	H
Karkkila	7	5W	V	Rovaniemi	9	700W	V
Kerimäki	9	10	H	Saarijärvi	7	5W	V
Kokkola	7	100W	H	Tammela	10	8	H
Koli	8	5	H	Tammisaari	5	150W	H
Kouvola	5	5W	H	Tampere	8	80	H
Kuopio	7	45	H	Tervola	3	20	H
Lahti	9	40	H	Turku	7	45	H
Lapua	5	80	H	Ylivieska	9	60	H

D.Prgr: W 09.00–11.40 (Thurs 11.55, Sat 08.00–12.00), 12.10–14.00 (Thurs 12.25–14.00, Sat 14.55–16.55), 15.55–16.25(Mon, Thurs), 15.25–16.55(Tues, Fri), 15.25–16.25(Wed), 17.30–19.30(Tues 20.30). About every other Sat 20.10–21.10 Mainos-TV-Reklam. Sun 07.45–09.00(only every other Sun), 12.45–13.30, 15.55–16.25, 17.30–19.45.
St's under construction: * due in 1964; ** due in 1965.
Taivalkoski* ch2 15kW – Kristiina** ch4 5kW – Ruka** ch5 0.1kW – Sippola** ch5 10kW – Turku** ch7 60kW – Pihtipudas** ch10 0.4kW – Eurajoki* ch11 20kW – Vaasa* ch11 0.1kW.
The number of low-powered (less than 100 watts ERP) repeater st's in operation: 15. Low-powered repeater st's under construction: 4.

RCA, USA, CSF, France: TV-tr's – Fernseh GmbH, Germany (picture equip) – Telefunken, Germany (sound equip) – Strand Electric Co, G.B, Mole & Richardson, G.B, AEG, Germany (lighting equip) – Arnold & Richter, Germany (film cameras) – Ampex Videotape, RCA, USA (videotape machines).

Seven Arts' "Films of the 50's—Money-Makers of the 60's"



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Distributed outside the United States and Canada by Seven Arts Productions International.

Reply to Norman B. Katz, Vice President Foreign Operations at Seven Arts House, 24 Berkeley Square, London, W1, England. Telephone: Hyde Park 0671 — Cable: NORFILM London.

OY MAINOS-TV-REKLAM AB:

An independent TV company for comm. prgr, to which the Finnish TV rents out its studios and channels. The daily adv. is made only in the beginning and at the end of the prgr's – **L.P:** P. Hanski – **D.Prgr:** W 11.40–12.10(exc. Thurs, Sat), 11.55–12.25(Thurs), 16.25(Tues, Fri, Sat 16.55)–17.30, 19.30–20.10(Mon 21.00, Thurs 20.35, Fri 20.40, Tues no tr). Sun 13.30–14.00, 16.25–17.30, 19.45–20.55.

OY TESVISIO AB (Go.)

Fi: By adv, comm. (spots) up to 10% – **Addr:** Ratakatu 9, Helsinki. **Cable:** Tesvisio. **Te:** 50-233 – **L.P:** Man. Dir: H. Miettunen. Dir. Prgr: K. Ehder. Dir. Tec: K. Teräsvuo.

Stations: Helsinki ch E8 10/2kW H, Tampere ch E2 20/4kW V, Turku ch E9 10/2kW V.

D.Prgr: Mon 16.45–20.00, Tues 16.00–21.00, Wed 16.50–20.00, Thurs 16.00–20.00, Fri 16.25–20.00, Sat 15.15–19.35, Sun 14.30–15.45, 17.15–19.30.

FRANCE

OFFICE DE RADIODIFFUSION-TELEVISION FRANÇAISE (Go.)

Addr. & L.P: See radio.

Principal stations: Audio Powers ¼ Vision powers indicated.
*=Reduced power (temporary or exp. tr).

Location	chF	kW	Pol.	Location	chF	kW	Pol.
1) Bastia	2	0.05*	V	18) Nancy	7	0.05	V
2) Caen	2	20	H	19) Niort	7	20	V
3) Limoges	2	20	H	20) Lille	8A	20	H
4) Troyes	2	20	H	21) Paris	8A	20	H
5) Ajaccio	4	0.05*	H	22) Brest	8	10	H
6) Besancon	4	3	V	23) Marseille	8	20	H
7) Carcassonne	4	20	V	24) Mulhouse	8	20	H
8) Nantes	4	20	V	25) Bourges	9	20	H
9) Reims	5	10	V	26) Bordeaux	10	0.5	H
10) Rennes	5	20	H	27) Dijon	10	0.5	V
11) Strasbourg	5	3	H	28) Grenoble	10	0.05	H
12) Toulouse	5	2	H	29) Rouen	10	10	H
13) Clermont Fd.	6	10	V	30) Toulouse	10	0.05	H
14) Metz	6	10	H	31) Amiens	11	20	V
15) St. Raphael	6	3	V	32) Aurillac	11	0.5	V
16) Gex	7	3	V	33) Le Mans	12	10	V
17) Le Havre	7	0.05	H	34) Lyon	12	20	H
				35) Perpignan	12	0.05*	H

Number of low powered relay st's:
Region of Bordeaux: 16 st's from 0.05W to 40W – **Region of Lille:** 5 st's from 0.1W to 40W – **Region of Limoges:** 5 st's from 0.3W to 3W – **Region of Lyon:** 87 st's from 0.1W to 250W – **Region of Marseille:** 13 st's from 0.3W to 50W – **Region of Nancy:** 29 st's from 0.3W to 500W – **Region of Paris:** 11 st's from 1W to 500W – **Region of Rennes:** 2 st's from 3W to 500W – **Region of Strasbourg:** 2 st's of 3W – **Region of Toulouse:** 29 st's from 0.1W to 6W.

D.Prgr: Mon–Fri 11.30–12.20, 17.25(Thurs 15.30)–22.15(approx). Sat 11.30–13.30, 16.30–22.30(approx). Sun 08.00–22.00. Additional School prgr's on Tues, Wed, Fri, Sat.

Second Prgr:
Stations: Paris ch22 10kW H – Lyon ch58 2kW H – Lille ch27 50kW – Marseille ch23 50kW – St. Etienne ch40 50kW.

D.Prgr: Mon–Fri 19.00–21.30(approx), Sat 18.15–22.10(approx), Sun 13.45–15.50(approx), 17.45–21.20(approx).

Radio relay links between: Paris–Lille, Paris–Rouen–Le Havre–Caen–Rennes–Nantes–Brest, Paris–Reims–Troyes–Metz(–Luttange)–Nancy –Strasbourg–Mulhouse–Besançon, Paris–Perreuse–Dijon–Lyon–Marseille, Cannes–Mont Agel–Corse, Lyon–Clermont Ferrand–Grenoble–St. Etienne, Paris–Perreuse–Bourges–Limoges and Bordeaux–Toulouse–Carcassonne–Perpignan–Les Baleares–Alger, Metz–Luxembourg, Dabo–Hornisgrinde (Germany), Lille–Cassel–Dover.
F.Pl: In 1965 St. Raphael 20kW, Toulouse 50kW.

Ampex Videotape, USA. – Wilh. Franz KG, Germany: EMT studio equip.

GERMANY

GERMAN FEDERAL REPUBLIC
ARBEITSGEMEINSCHAFT DER ÖFFENTLICH-RECHTLICHEN RUNDFUNKANSTALTEN DER BUNDESREPUBLIK DEUTSCHLAND (ARD)

German Television Prgr. Coordination, 8 München 23, Leopoldstrasse 10. **Te:** 3 65 61. **Telex:** 05-22480 – **L.P:** Coordinator: Dr. K. Mohr. Deputy-Coordinator: R. E. Lembke. Press dept: O. Meitzner.
A common prgr. is being broadc. throughout Germany under the title "Deutsches Fernsehen". Each of the organizations participates in the production of this prgr. In addition reg. broadc's are transmitted by each of the broadc. organizations.

Community Television Prgr's: Mon–Fri 16.00–17.15, 19.00–approx 22.00, Sat 13.30–19.30, 19.00–approx 22.00, Sun 10.00–approx 22.00.
Reg. Prgr's: W 17.15–19.00.

BAYERISCHER RUNDFUNK (Anstalt des öffentlichen Rechts)

Fi: By license payments – **Ad:** W max. 12 min.
Addr: Bayerischer Rundfunk, Fernsehdirektion I und Fernsehdirektion II 8 München 2, Rundfunkplatz 1 – **Studios:** 8 München-Freimann and 8043 Unterföhring – **L.P:** Intendant: Chr. Wallenreiter, Dir. TV: Dr. Cl. Münster. Dir. Stud. Prog: Dr. H. Oeller. Dir. Adm: H. Spies. Dir. Tec: Dr. F. Daser.

Stations	ch E	kW		ch E	kW
Grünten	2	100/20H	Brotjacklriegel	7	100/10H
Kreuzberg	3	100/20V	Wendelstein	10	100/20H
Ochsenkopf	4	100/20V	Würzburg	10	2/0.4H
Dillberg	6	100/20H	Hohenpeissenb.	25	10/2H
			Hoher Bogen	55	225/45H

Low power stations:

	ch E	Watts		ch E	Watts
*Bad Reichenhall	5	5/1H	*Pappenheim	9	2/0.4H
*Bad Tölz	5	25/5V	*Bad Berneck	10	0.1/0.02H
*Eichstätt	5	5/1H	*Kulmbach	10	2/0.4H
Erlau b. Passau	5	10/2H	Garmisch-Partenkirchen	10	2/0.4V
*Hohe Linie	5	100/20V	*Wunsiedel	10	10/2H
*Kelheim	5	10/2H	*Bad Kissingen	11	5/1H
Herzogstand	5	50/10H	*Bamberg	11	20/4H
*Landshut	5	4/0.8V	*Berchtesgaden	11	2/0.4H
*Passau	5	20/4V	*Füssen	11	10/2H
*Rothenburg	5	5/1H	*Lohr/Main	11	1/0.2H
*Ruhpolding	5	30/6V	Neustadt	11	2.5/0.5H
Tegernseer Tal	5	2/0.4H	*Weissenburg	11	12/2.4H
*Amorbach	6	5/1H	*Mainbullau	12	30/6H
*Miltenberg	7	10/2H	*Treuchtlingen	12	15/3H
Ochsenfurt	7	30/6H	Inntal	28	50/10H
*Hindelang	9	3/0.6H	Neustadt	56	150/30H
Grassau	9	30/6H	Coburg	59	500/100H
Obernzell	9	2/0.4H	Pfaffenberg	59	1.5/0.3kWH
Lindau	9	100/20H			
*Mittenwald	9	1.25/0.25H			

Testtr's: 09.00–11.00, 12.00–15.50. Sat 12.00–15.50 – **Pub:** "Pressedienst – Studienprogramm" (Weekly).

* Fabricca Italiana Apparecchi Radio SpA, Italy, has sold different TV repeaters, antennas, amplifiers to these st's marked *.
Ampex Videotape, USA.
Pye TVT, GB: Studio equip, O.B.V.

HESSISCHER RUNDFUNK (Anstalt des öffentlichen Rechts)

Addr: See radio – **L.P:** Dir. Prgr: H. O. Grünefeldt. Entertainment: A. Neve. News: W. Hanke. Play: H. Grund. Prod: H. Uhlich. Afternoon prgr, Youth prgr, adult educ: J. Göhlen.

Stations: Feldberg ch E8 100/10kW H – Meissner ch E7 100/10kW H – Biedenkopf ch E2 30/2kW H d – Hardberg ch E5 3/0.1kW H d – Rimberg ch E57 400/20kW.
Freq. Changers: Po: H.

	ch	Watts		ch	Watts
Marburg	11	30/5	Weilmünster	11	3/0.5
Dillenburg	5	3/5	Michelbach	11	3/0.5
Bad Orb	10	1/0.5	Melsungen	9	1/0.5
Erbach/Odw.	6	0.75/0.5	Spangenberg	9	1/0.5
Bad König	6	1/0.5	Willingen	9	3/0.5
Biedenkopf	6	1/0.5	Helmarshausen	9	1/0.5
Michelstadt	11	5/5	Eppstein/Ts.	11	3/0.5
Philippsthal	9	3/5	Karlshafen	5	1/0.5
Kammerforst	9	10/3	Ruppertshain/Ts.	11	0.3/0.05
Bad Schwalbach	5	1/0.5	Wirtheim	6	3/0.5
Haiger	6	1/0.5	Helsa	9	5/0.5
Wetzlar	11	10/5	Reichelsheim	6	3/0.5
Birkenau/Odw.	11	1/0.5	Neustadt/Odw.	6	3/0.5
Höchst/Odw.	11	3/0.5	Arnoldshain/Ts.	11	1/0.5
Salmünster	11	3/0.5	Grävenwiesbach	11	3/0.5
Fulda	11	25/5	Reichenbach/Odw.	11	3/0.5
Bad Sooden-Allendorf	9	1/0.5	Trendelburg	9	3/0.5
Bad Hersfeld	9	10/0.5	Zierenberg	9	1/0.5
Rotenburg (Fulda)	9	3/0.5	Schlangenbad/Ts.	9	1/0.5
Schlüchtern	6	3/0.5	Wilsenroth	5	3/0.5
			Sandershausen	9	3/0.5
			Birstein	12	30/5

D.Prgr: 16.00–21.30, Sat also 13.30–16.00. Sun also 10.00–16.00.
Test-tr's: W 09.30–11.00, 12.00–15.50 – **Ad:** Mon–Fri 17.15–18.00, Sat 17.30–18.00, W 18.20–18.55.
IIIrd Prgr: "Hessisches Fernsehprogramm" Tues, Wed, Thurs 18.30–21.30.
Tr's (Deutsche Bundespost): Feldberg ch 54, Kassel ch 42.

television facilities in Europe

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RADIO BREMEN (Anstalt des öffentlichen Rechts)

Fi: By license payments – **Ad:** D (exc. Sun) max 20 min – **Addr:** & **L.P:** See radio – **Stations:** Bremen ch E22 100/20W H – Bremerhaven ch E5 0.16/0.03kW V – **D.Prgr:** Mon–Fri 16.00–17.15, 19.00–21.30 Sun 10.00–23.00 – **Reg. Prgr:** W 17.15(Sat 17.30)–19.00.
Special Prgr: Mon–Fri 09.00–12.00.

Ampex Videotape, USA.

NDR-FERNSEHEN

Addr: Hamburg-Lokstedt, Gazellenkamp 57. **Te:** 44 19 31 – **L.P:** Intendant: G. Schröder. Dir. Prgr: Dr. H. Arnold. Presse, Information, Ausland: M. Jenke. Zeitgeschehen: J. Fest. Reg. Prgr's: E. Herzig. Tageschau: H. J. Reiche. Fernsehspiele: E. Monk. Musik: Dr. Th. M. Langner.

	ch	kWPol.		ch	kWPol.
Oldenburg/Steink.	2	100H	Lingen	41	400H
Flensburg	4	50H	Dannenberg	43	250H
Kiel	5	5H	Bungsberg	50	260H
Hannover	8	5H	Osnabrück	50	12.5H
Hamburg	9	100H	Aurich	53	250H
Heide	10	25V	Oldenburg/Steink.	55	400H
Harz	10	100H			
Freq. Changers:	**ch**	**WPol.**		**ch**	**WPol.**
Goslar/Oker	5	30H	Hahnenklee	8	1.5V
Bad Grund I	5	8V	Hess. Oldendorf	8	25V
Osnabrück	5	60V	B. Salzdetfurth I	8	1V
Hameln/Weser	5	12V	Zorge	8	0.5H
Freden	5	3V	Wildemann II	8	0.5H
Helgoland I	5	0.5H	Wieda	8	0.5H
Wildemann I	5	2V	Kreiensen	8	4H
Königslutter	5	30V	Göttingen	9	60V
Stadtoldendorf	5	1.5V	Alfeld	9	2.5V
Cuxhaven	6	100V	Bodenwerder	9	1H
Bad Harzburg	7	10H	Bad Lauterberg I	9	3H
Lübeck	7	300V	Herzberg II	9	0.5H
Rinteln	7	8V	Bad Grund II	9	0.25H
Wolfshagen	7	2V	Bad Münder	9	30V
Sieber	8	1.2V	Grafensundern/Iburg	10	25V
Holzminden	8	4H	Bad Sachsa	11	5H
St. Andreasberg	8	2V	B. Salzdetfurth II	11	0.75V
Braunlage	8	10H	Lauthenthal	11	1.2V
Hann. Münden	8	10H	Bad Lauterberg II	11	10V
Uslar	8	1V	Flensburg	11	15H
Osterode	8	5V	Bad Herzberg	12	0.05H
Helgoland II	8	1V			

D.Prgr: Test-tr's: Hamburg: Mon 12.00–15.45, Tues–Fri 09.00–11.00, 12.00–15.45, Sat 09.00–11.00. **Reg.Prgr:** W 17.45–18.35, Sun 18.00–18.30 – **Ad:** W 18.25–19.00.

Telefunken AG, Germany, delivered tr's: 1×1kW, 1×2kW (Hannover), 10kW (Flensburg), further 2×10kW tr's.
Ampex Videotape, USA.
Pye T.V.T, GB: Studio equip.

WDR FERNSEHEN

Addr. & L.P: See radio.
First TV-Programme: Pol: H.

Stations:	**ch.E**	**kW(ERP)**		**ch.E**	**kW(ERP)**
Aachen-Stolb	24	200/40	Münster	32	250/50
Bonn	5	0.5/0.1	Nordhelle	30	200/40
Kleve	46	100/20	Teutob. Wald	11	100/20
Köln	11	10/2	Wuppertal	6	0.6/0.12
Langenberg	9	100/20			

plus 152 low power freq. changers.

D.Prgr: Testtr: W 09.00–11.00, 12.00–17.00(Sat 13.00).
Reg. Prgr: W 17.30–18.15 (Sat also 13.00–13.30).
Common Prgr: W 16.00–17.00 (Sat 13.30–17.25), 19.00–at least 21.00. Sun 09.30–at least 21.00 – **Ad:** W 18.15–19.00.
On different channels, scheduled to transmit a **Third TV-Prgr.** by Westdeutscher Rundfunk Köln, starting from a time as yet indefinite, there is transmitted now a reg. prgr. ("Prisma des Westens") W 19.15–19.45.

Stations	**ch.E**	**kW(ERP)**		**ch.E**	**kW(ERP)**
Wuppertal	42	100	Düsseldorf	55	500
Dortmund	53	500	Bonn (Ölberg)	49	100

Ampex Videotape, USA.

SAARLÄNDISCHES FERNSEHEN A.G. (Comm.)

Fi: By license payments and adv – **Ad:** 17.15–19.00 – **Addr:** Schloss Halberg, Saarbrücken, Postfach 1050. **Cable:** Rundfunk Saar. **Te:** 6021 – **L.P:** See radio – **Stations:** Göttelborner Höhe chE2 100/20kW V – **Low Power Stations:** Güdingen ch6 50/10W H – Neuweiler ch6 50/10W H – Stahlhammer ch8 0.25/0.05W – Mettlach ch9 3/0.6W H – Perl ch9 50/10W H – Scheidt ch9 0.2/0.04W V – Blieskastel ch11 42/8.4W V – Saarbrücken ch11 250/50W V – Saarhölzbach ch11 0.4/0.08W H – St. Ingbert ch11 2/0.4W V – **D.Prgr: Reg. Prgr:** "Werbesendung" 17.15–18.58.

Ampex Videotape, USA.

SENDER FREIES BERLIN

Fi: By license payments – **Addr:** Fernsehen, Masurenallee 8/14, 1 Berlin 19. **Cable:** Sender Freies Berlin. **Te:** 92031 – **L.P:** See radio **Station:** Berlin chE7 100/10kW – **D.Prgr:** W: 09.00–12.00, 15.25–17.15, 17.35–19.00, 19.00–22.30(approx). Sat: 09.00–12.00, 13.30–22.30(approx). Sun 09.00–22.30(approx). Testtr: W 12.00–15.25.

Ampex Videotape, USA.

SÜDDEUTSCHER RUNDFUNK FERNSEHEN

(Anstalt des öffentlichen Rechts)
Fi: By license payments – **Addr:** Neckarstrasse 145, 7000 Stuttgart. **Cable:** Südfunk. **Te:** 299701 – **L.P:** TV-Dir: H. Jaedicke. Dir. Tec: Dr. H. Rupp.

Stations	**ch**	**kW(ERP)**			**ch**	**kW(ERP)**	
Heidelberg I	7	50/10kW	V	Stuttgart	11	100/20kW	H
Aalen*	8	20/4kW	V	Heidelberg II	50	500/100kW	H
Waldenburg	9	100/20kW	H	* from 64/65: 50/10kW			

Frequency changers:

	ch	W(ERP)			ch	W(ERP)	
Pforzheim	5	500/100	H	Tauberbischofsh.	6	1.2/0.24	V
Heidelberg Stadt	5	2/0.4	V	Neckargemünd	6	1.5/0.3	H
Herbrechtingen	5	0.6/0.12	V	Niedernhall	6	1.5/0.3	V
Laudau	5	2/0.4	H	Schwäb. Gmünd	6	2/0.4	V
Mühlacker	5	0.5/0.1	V	Unterkochen	6	2/0.4	V
Murrhardt	5	3/0.6	V	Geislingen	6	3/0.6	V
Schwäbisch Hall	5	1.5/0.3	H	Eberbach/Neckar	9	5/1	V
Stuttgart-Obertürkheim	5	5/1	H	Niefern	9	1.5/0.3	V
				Deggingen	10	5/1	V
Adelsheim	6	2.5/0.5	H	Oberkochen	10	0.7/0.14	V
Blaubeuren	6	0.5/0.1	H	Heidenheim	11	1/0.2	H
Ebersbach-Weiler	6	2/0.4	H	Ulm	11	30/6	V
Giengen	6	0.5/0.1	V	Bad Mergentheim	11	1/0.2	V
Königsbronn	6	1/0.2	V	Künzelsau	11	1/0.2	V
Mosbach	6	0.8/0.16	H	Wertheim	11	5/1	H

D.Prgrs: W: 16.00–17.20, 19.00–21.30 (approx). Sat: 14.00–17.20, 19.00–22.00 (approx). Sun: 10.00–22.00 (approx) – **Reg. Prgr:** Mon–Fri 17.50–18.20. **Ad:** W: 17.20(Sat 17.30)–17.50, 18.20–19.00. **Test-prgrs:** W 09.00–11.00 and 12.00 to start of prgr's.
F.Pl: Further 7 freq. changes.

Telefunken AG, Germany: delivered 2×2kW tr's (Aalen, Waldenburg).

SÜDWESTFUNK (Anstalt des öffentlichen Rechts)

Fi: By license payments – **Ad:** W: 17.30–17.50, 18.20–19.00 – **Addr:** Südwestfunk Fernsehen, Hans Bredowstr, Baden-Baden. **Cable:** Südwestfunk. **Te:** 761 – **L.P:** See radio.

Stations:	**chE**	**kW(ERP)**	**Pol.**		**chE**	**kW(ERP)**	**Pol.**
Raichberg	4	40/8	H	Donnersberg	10	100/20	H
Trier	5	0.6/0.12	H	Mainz	11	1/0.2	H
Koblenz	6	50/10	H	Waldshut	21	1/0.2	H
Weinbiet	6	30/6	H	Eggberg	22	0.8/0.16	H
K'lautern	7	0.3/0.06	H	Eifel	23	20/4	H
Zweibrücken	7	0.08/0.01	H	Haardtkopf	25	200/40	H
Freiburg	7	0.021/0.04	H	Wannenberg	28	5/1	H
Baden-Baden	7	0.3/0.06	H	Saarburg	31	20/4	H
Feldberg i Schw.	8	100/20	H	Grünten	43	500/100	H
				Marienberg	47	50/10	H
Hornisgr.	9	100/20	H	Brandenkopf	48	20/4	H

+133 low power-freq. satelites.
D. Prgr: 16.00–17.00, 17.30–22.00 (Reg. prgr. 17.30–19.00) – Testtr: W: 09.00–11.00, 12.00 to approx. 15.50.

ZWEITES DEUTSCHES FERNSEHEN

(Anstalt des öffentlichen Rechts)
Fi: By license payments – **Addr:** Mainz, Postfach 343. **Te:** 2051. **Telex:** 04 187661 – **L.P:** Dir. Gen: Prof. Dr. K. Holzamer. Dir. Prgr: U. Grahlmann. Dir. Inf: W. Dietrich. Dir. Adm: Dr. F. Huch. Dir. Tec: R. Kaiser. Dir. Foreign Relations: E. P. Braun.

Stations: chE. Pol: H

	ch	kW(ERP)		ch	kW(ERP)
Aachen	37	500/100	Coburg	22	250/50
Augsburg	23	500/100	Cuxhaven	24	330/66
Baden-Baden	31	330/66	Deggendorf	33	250/50
Bayreuth	30	100/20	Donaueschingen	22	100/20
Bamberg	24	100/20	Donnersberg	37	330/66
Berlin	33	500/100	Dortmund	25	500/100
Bielefeld	33	500/100	Düsseldorf	29	500/100
Bonn	26	100/20	Eiderstedt	31	500/100
Bremen	32	500/100	Eutin	21	500/100

	ch	kW (ERP)		ch	kW (ERP)
Feldberg/Ts.	34	500/100	Münster	21	50/10
Flensburg	39	500/100	Niebüll	34	200/40
Freiburg/Breisgau	33	500/100	Nürnberg	34	250/50
Fulda	26	200/40	Ostfriesland	33	250/50
Göttingen	21	250/50	Passau	30	50/10
Haardtkopf	35	400/80	Ravensburg	37	500/100
Hamburg	30	500/100	Regensburg	21	500/100
Hannover	24	500/100	Rottweil	35	330/66
Heidelberg	27	500/100	Saarbrücken	32	330/66
Hof	23	500/100	Schleswig	26	100/20
Kaiserslautern	22	25/5	Schnaitsee;	26	250/50
Kassel-Wellerode	35	100/20	Spessart	35	250/50
Kiel	35	100/20	Stuttgart	26	300/60
Koblenz	31	100/20	Torfhaus	23	500/100
Landshut	39	200/40	Trier	37	50/10
Lingen	24	500/100	Uelzen	27	500/100
Minden/Westf.	26	330/66	Würzburg	25	500/100
Monschau	21	330/66	Wuppertal	22	100/20
München	35	250/50			

D.Prgr: Testtr: W (exc. Wed) 10.00 until start of Prgr. Wed: 14.00 until start of Prgr. **Common Prgr:** W 18.40–22.30 approx. Sat: 17.30–22.30 approx. Sun: 18.50–22.30 approx. Sport on Sunday afternoon.

Wilh. Franz KG, Germany: EMT studio equip.

GERMAN DEMOCRATIC REPUBLIC
DEUTSCHER FERNSEHFUNK (Go.)

Fi: By state – **Advertising:** Three times weekly after 18.00 – **Addr:** Berlin-Adlershof, Rudower Chausse 116. **Cable:** Fernsehfunk Berlin. **Te:** 642021 – **L.P:** Intendant: H. Adameck, Programme Leitung: D. Schmotz, Sendeleitung: M. Weigand.

Stations: Helpterberg chE3 6/1.2kW H – Cottbus chE4 6/1.2kW H – Berlin/Inselsberg chE5 100/20kW H – Brocken chE6 100/20kW H – Görlitz chE6 0.95/0.19kW H – Schöneck chE6 0.5/0.1kW V – Eisenhüttenstadt chE7 0.5/0.1kW H – Lobenstein chE7 V – Karl-Marx-Stadt chE8 100/20kW H – Leipzig chE9 100/20kW V – Dresden chE10 100/20kW V – Schwerin chE11 100/20kW H – Frankfurt/Oder chE11 0.5/0.1kW H – Blessberg chE12 0.5/0.1kW H – **Testtr's:** Berlin chE27, Dequede/Inselsberg chE31, Sonneberg chE33 – **D.Prgr:** Mon–Fri 08.50–13.00,15.00–22.00,Sat 08.50–11.30,13.00–23.00, Sun 08.50–22.00.

Pye T.V.T, GB: Studio equip, OBV.

GIBRALTAR
GIBRALTAR TELEVISION (Comm.)

Addr: Television House, Wellington Front. Gibraltar. **Studios:** Television House, Queensway, Gibraltar. **Cable:** Broadcasts. **Te:** 777. **L.P:** See radio – **Station:** chE6 200/50W H – **D.Prgr:** 18.30–22.00.

The Marconi Company Ltd, GB: 1×3W tv-tr, 1 Amplifier 50W, Ant.

GREAT BRITAIN
BRITISH BROADCASTING CORPORATION

The BBC's Television Service is an integral part of the British Broadcasting Corporation – **Addr. and L.P:** See radio.

Stations	ch	kW		Stations	ch	kW	
Divis	1	12	H	Les Platons[4]	4	1	H
Crystal Palace[1]	1	200	V	Sutton Coldf.	4	100	V
Thrumster[6]	1	0.25–7ø)	V	Folkestone	4	0.0005–0.035ø	H
Sheffield	1	0.05	H				
Llandrindod Wells	1	1.3	H	Meldrum	4	4–17ø	H
Redruth	1	1.2–10	H	Hastings	4	0.002–0.014ø	H
Llanddona	1	0.2–5.8	V	Manningtree	4	0.56–4.8ø	H
Dover	2	0.04–1.4	V	Wenvoe	5	100	V
Holme Moss[2]	2	100	V	Pontop Pike	5	12	H
Brighton	2	0.04–0.4ø)	V	Douglas[7]	5	0.18–2.8ø	V
Londonderry[8]	2	0.5–1.5ø)	H	Peterborough	5	1	H
N. Hessary T.	2	1.5–15ø)	V	Orkney	5	4–14ø	V
Rosemarkie	2	6.0–20	H	Fort William	5	1.6	H
Oxford	2	0.15–0.64ø	H	Oban	4	0.4–3ø	V
Kirk o'Shotts[3]	3	100	V	Ventnor	5	0.0035–0.0096ø	H
Tacolneston[5]	3	2.1–45ø	H				
Ashkirk	1	0.25–18.5ø	V	Enniskillen	5	0.7–6.8ø	V
Ballachulish	2	0.014–0.11ø	V	Shetland	3	0.36–6ø	V
Kinlochleven	1	0.0008–0.005	V	Eastbourne	5	0.006–0.05ø	V
				Haverfordwest	4	0.17–10ø	H
Skegness	1	0.059	H	Holyhead	4	0.0034–0.0106ø	H
Rowridge[9]	3	0.6–97ø	V				
Blaen-plwyf	3	1–3ø	H	Okehampton	4	0.007	V
Morecambe Bay	3	0.2–5.15ø		Wenvoe	13	5.8–200ø	V
Swindon	3	0.001–0.17ø	H	Winter Hill	12	0.4–10ø	V
Sandale	4	10–28ø	H	**UHF 625-Line BBC 2**			
				Crystal Palace	33	500	H

[1] London. [2] Nr. Huddersfield. [3] C. Scotland. [4] Channel Islands. [5] Norwich. [6] N.E. Scotland. [7] Isle of Man. [8] N. Ireland. [9] Isle of Wight. ø) Directional transmitting aerial.

D.Prgr: All stations: Trade Test tr's: Mon–Sat 10.00–13.00. Prgr. (hours approx): Mon–Fri 10.00–12.00, 14.00–14.40. For Schools (during term-time), 14.00–15.30; 17.00–23.05. Sat 13.45–23.00. Sun 14.00–18.15, 19.00–23.00.

The BBC has started a second TV prgr. on UHF on 625 lines as opposed to the existing prgr. on VHF on 405 lines. This second prgr. called BBC-2 started on April 20th 1964 for viewers in the London area and it is expected that by 1966 it will be extended to 75% of the UK, giving a planned alternative prgr. to BBC-1. The BBC anticipates that it will introduce colour television broadc. by early 1967 although no decision has yet been made about the system of transmission which will be employed.

INDEPENDENT TELEVISION AUTHORITY (I.T.A.) Comm.

Fi: Prgr. contractors financed solely from adv. revenue. I.T.A. financed solely from rentals paid by contractors – **Ad:** 6 mins. per h averaged over the day. Max. in any 1 h 7 mins – **Addr:** 70 Brompton Rd, London, S.W.3. **Te:** KNIghtsbridge 7011 – **L.P:** Chmn: The Rt. Hon. Lord Hill of Luton, P.C. Dir. Gen: Sir Robert Fraser, O.B.E.

Stations: chB	ch	Po.	kW(ERP)	Area served
Croydon	9	V	400	London
Lichfield	8	V	400	Midlands area
Winter Hill	9	V	100	Norths area
Emley Moor	10	V	200	Norths area
Black Hill	10	V	475	C. Scotland
St. Hilary	10	V	200	So. Wales, We. England
Chillerton Down	11	V	100	So. England
Dover	10	V	100	So. England
Burnhope	8	H	100	No. Ea. England
Mendlesham	11	H	200	Ea. Anglia area
Black Mountain	9	H	100	No. Ireland
Strabane	8	V	100	No. Ireland
Stockland Hill	9	V	100	So. We. England
Caradon Hill	12	V	200	So. We. England
Caldbeck	11	H	100	The Borders
Selkirk	13	V	25	The Borders
Durris	9	H	400	No. Ea. Scotland
Mounteagle	12	H	50	No. Ea. Scotland
Fremont Point	9	H	10	Channel Islands
Presely	8	2	100	We. and No. Wales
Arfon	10	H	10	We. and No. Wales
Moel-y-parc	11	V	25	We. and No. Wales

D.Prgr: Trade transm: W 10.00–14.30, 15.30–17.00. For schools (during term time) Mon–Fri 14.30–15.30.

Prgrs: Mon–Fri 17.00–23.30, Sat 13.15–23.30, Sun 11.00–12.00, 14.00–23.30.

Independent Television News Ltd, TV House, Kingsway, London, W.C.2 – Provides the main news bulletins for all ITA Areas.

Independent Television Companies Association, TV House, Kingsway, London, W.C.2 – The Association acts on behalf of all prgr. companies on certain matters of common interest.

Prgr. Companies: ABC Television Ltd, TV House, Mount Street, Manchester 2. Te: Deansgate 4597 – **Associated Rediffusion Ltd,** TV House, Kingsway, London, W.C.2. Te: HOLborn 7888 – **Associated Television Ltd,** ATV House, 17 Great Cumberland Place, London, W.1. Te: AMBassador 8040 – **Granada TV Network Ltd,** Granada TV Centre, Quay Str, Manchester 3. Te: Deansgate 7211 – **Scottish Television Ltd,** Theatre Royal, Hope Street, Glasgow. Te: Glasgow Douglas 9999 – **TWW Ltd,** Pontcanna Studios, Cardiff. Te: 26333 – **Southern Television Ltd,** Southern Television Centre, Northam, Southampton. Te: 28582 – **Tyne Tees Television Ltd,** The Television Centre, City Rd, Newcastle-upon-Tyne. Te: 610181 – **Anglia Television Ltd,** Anglia House, Norwich. Te: 28366 – **Ulster Television Ltd,** Havelock House, Ormeau Rd, Belfast 7. Te: 28122 – **Westward Television Ltd,** Derry's Cross, Plymouth. Te: 69311 – **Border Television Ltd,** The Television Centre, Carlisle. Te: 25101 – **Grampian Television Ltd,** Queen's Cross, Aberdeen. Te: 53553 – **Channel Television Ltd,** The Television Centre, Rouge Bouillon, St. Helier, Jersey, C.I. Te: 23451.

Ampex Videotape, USA: BBC (Belfast, Briston, Kingswood, London, London (A.P.), Manchester), BBC (TV Cont.) (London), Ulster TV (Belfast), TWW (Bristol), TWW (Cardiff), Granada (Chelsea), Scottish TV (Glasgow), Assc. Redif. (London), Assc. TV (London), ATV (London), ABC (Manchester), Granada (Manchester), Tyne Tees (Newcastle), Anglia TV (Norwich), Southern TV (Southampton), ABC (Teddington), Assc. Redif. (Wembley).

The Marconi Company Ltd, G.B. delivered to ITA: TV tr's: Durris 2×4, 2×1kW. Black Hill 2×4, 2×2½kW. Black Mountain 2×4, 2×1kW. Arfon 4×10, 8×500W. Burnhope 2×4, 2×1kW. Chillerton Down 2×4, 2×1kW. Croydon 2×10, 2×2½kW. Mounteagle 2×4, 2×1kW. Caldbeck 2×4, 2×1kW. Dover 2×4, 2×1kW. Emley Moor 2×10, 2×2½kW. Moel-y-Parc 4×10, 8×500W. Selkirk 4×10, 8×500W. St. Hilary 2×18kW amplifier. Winter Hill 2×10, 2×2½ kW.

Antennas: Croydon, Winter Hill, Emley Moor, Black Hill, St. Hilary, Chillerton Down, Burnhope, Black Mountain, Caldbeck, Mounteagle, Selkirk and Moel-y-Parc.
Studio equip: Aberdeen, Carlisle, Inverness, Moel-y-Parc – OBV: Associated Rediff. (London) (3), ABC TV (London) (3), Associated TV (London) (1), Tyne Tees TV Newcastle) (1).
AKG, Austria, delivered studio equip. (recorders, microphones) to: BBC TV, Associated-Rediffusion Ltd, Associated TV Ltd, Granada TV, ABC TV, Grampian TV, Scottish TV, Tyne Tees TV, Anglia TV, Southern TV, TWW Ltd, Westward TV, Ulster TV, Irish TV, Independent TV News.
PYE T.V.T. (G.B.) delivered to I.T.A: TV tr's: Caradon Hill 2×5, 2×1.25kW, Stockland Hill 2×5, 2×1.25kW, Presely 2×5, 2×1.25 kW, Fremont Point 2×0.5, 2×0.125kW, Mendlesham 2×5, 2×1.25 kW, St. Hilary 2×5, 2×20kW, Lichfield 2×20, 2×5kW.
E.M.I. Antennas: Lichfield, Mendlesham, Caradon Hill, Stockland Hill, Dover, Durris, Fremont Point, Presely, Arfon, Strabane.
Wilhelm Franz KG, Germany, delivered EMT studio equip. to ABC Television, Anglia Television, Assoc. Rediff. Associated Television, Border Television, Granada TV Network, Scottish Television.

GREECE

NATIONAL HELLENIC BROADCASTING INSTITUTE

(in collaboration with Public Power Corpo. and RAI).
Addr & L.P: see radio. **Station:** Athens ch E5 0.1kW.
D. Prgr's: Special prgr's only – **F.Pl:** Regular prgr's on increased TV network.

HOLLAND

NEDERLANDSE TELEVISIE STICHTING (N.T.S.)

Addr: P.O. Box 10, Hilversum. **Cable:** Televisie. **Te:** 0 2950/16851 – The Dutch prgr's are provided by the N.T.S. and the broadcasting societies as mentioned under radio – **Board of the N.T.S:** Chmn: E. A. Schüttelhelm. Vice Chmn: A. B. Rosjen LLD. Secr: H. W. van Doorn L.L.D.
Stations: Lopik chE4 100/20kW H – Roermond E5 50/10kW H – Smilde E6 50/10kW H – Goes E7 5/1kW H – Markelo E7 30/6kW H – Huisduinen E10 1/0.2kW H – **D.Prgr:** Sun 18.30–21.30, Mon 18.30–21.45, Tues 18.30–21.20, Wed 16.00–16.45, 18.30–21.35, Thurs 13.30–14.30, 18.30–21.50, Fri 18.30–21.35, Sat 14.00–16.45, 18.30–21.50.

Ampex Videotape USA.
The Marconi Company Ltd, GB, delivered OBV (1).
Telefunken AG, Germany, delivered studio equip. (recorders).

RECLAME EXPLOITATIE MAATSCHAPPIJ (REM) NV (Comm.)

Fi: by adv – **Ad:** 17.30–19.00, 21.00–22.00 (11 min's) – **Addr:** Herengracht 543, Amsterdam, Holland – **L.P:** Dir. Gen, Prgr. Mgr Film Buyer: J. M. Brandel.
Station (System: RCA): TV-Nordzee ch E11 250kW – **D.Prgr's:** 17.30–22.00 (Entertainment).

HUNGARY

MAGYAR RADIO ES TELEVIZIO (Go.)

Addr: Television Direction, V. Szabadságter 17, Budapest. **Te:** 113-200.
L.P: Dir. Gen: K. Haynal. Dir. F. Kulcsár. Dir. Tec: R. Kerpel.

Stations:	ch	kW			ch	kW	
Budapest I	R1	30/10	H	Miskolc	R9	0.05/0.025	H
Pécs	R2	1/0.4	H	Sopron	R9	0.05/0.025	V
Tokaj	R4	1/0.25	H	Szentes	R11	20/4	H
Kékes	R8	4/0.8	H	Kabhegy	R12	20/4	H

D.Prgr: Tues, Wed, Thurs, Sat: 17.00–22.00, Sun 09.00–11.00, 15.00–22.00.

Pye TVT, GB: Studio equip, O.B.V.
Wilh. Franz KG, Germany: EMT studio equip.

IRELAND

TELEFIS EIREANN (TV sce. maintained by national broadc. sce.)

Fi: By license payments and adv – **Ad:** 10% of prgr. hrs – **Addr:** Donnybrook, Dublin 4. **Te:** 693111 – **L.P:** See radio.
Stations: [1] System I (625 lines). [2] System A (405 lines).
Mt. Kippure[2] ch B7 100/25kW H – Truskmore[2] ch B11 100/25kW V – Kippure[1] ch IH 100/20kW H – Maghera[1] ch IB 80/16kW H – Mt. Leinster[1] ch IF 100/20kW V – Mullaganish[1] ch ID 100/20kW V – Truskmore[1] ch IJ 100/20kW V – **D.Prgr:** 17.00–23.15.

Ampex Videotape, USA – The Marconi Company Ltd, GB, delivered 1×2kW, 1×10kW tr's, studio equip – Pye T.V.T. GB: Tr's ant. studio equip.

ITALY

RADIO-TELEVISIONE ITALIANA

FI & AD: See radio – **Addr:** Direzione Centrale TV, Via del Babuino 9, Roma – **L.P:** Dir. Prgr. TV: Dr. Sergio Pugliese. Dir. Tec. TV: Eng. Gino Orsini.

National Prgr: Stations:
o=H, v=V. The first letter in the brackets indicate the channels (see page 247).
PIEMONTE: Torino (C–o) 16/4kW+36 satellites.
VALLE D'AOSTA: 11 satellite st's.
LOMBARDIA: Milano (G–o) 24/6kW – M. Penice (B–o) 100/25kW+37 satellites.
SARDEGNA: M. Limbara (H–o) 3/0.75kW – M. Serpeddi (G–o) 2.12/0.253kW – P. Badde Urbara (D–o) 145/36.25kW+30 satellites.
TRENTINO-ALTO ADIGE: Bolzano (D–o) 1.5/0.375kW – Paganella (G-o) 1.33/0.33kW+47 satellites.
VENETO: Col Visentin (H-o) 0.64/0.16kW – M. Venda (D-o) 100/25kW+40 satellites.
FRIULI-VENEZIA GIULIA: Trieste (G-o) 1.4/0.35kW – Udine (F-o) 2/0.5kW+19 satellites.
LIGURIA: Portofino (H-o) 127/31.75kW+32 satellites.
EMILIA-ROMAGNA: 35 satellite st's.
TOSCANA: M. Argentario (E-o) 2.5/0.625kW – M. Serra (D-o) 270/67.5kW+47 satellites.
MARCHE: M. Conero (E-o) 24/6kW – M. Nerone (A-o) 30/7.5kW+30 satellites.
UMBRIA: M. Peglia (H-o) 34/8.5kW+10 satellites.
LAZIO: M. Favone (H-o) 0.24/0.06kW – Roma (G-o) 36/9kW+35 satellites.
ABRUZZI-MOLISE: Pescara (F-o) 1/0.25kW+39 satellites.
CAMPANIA: M. Faito (B-o) 53/13.25kW – M. Vergine (D-o) 1/0.25 kW+25 satellites.
PUGLIE: Martina Franca (D-o) 220/55kW – M. Caccia (A-o) 30/7.5kW – M. Sambuco (H-o) 35/8.75kW+10 satellites.
BASILICATA: 22 satellite st's.
CALABRIA: Gambarie (D-o) 19/4.75kW – M. Scuro (G-o) 7/1.75 kW+36 satellites.
SICILIA: M. Cammarata (A-o) 30/7.5kW – M. Lauro (F-o) 50/12.5 kW – M. Pellegrino (H-o) 7/1.75kW – M. Soro (E-o) 4/1kW+34 satellites.
D.Prgr: W 12.30–15.05 "Telescuola" (for schools) 16.00–17.00 (Childrens h.), 17.30–22.00 approx. N: 17.30, 19.30, 22.00. Sun 09.15–11.00, 15.00–23.00.

Second Prgr:

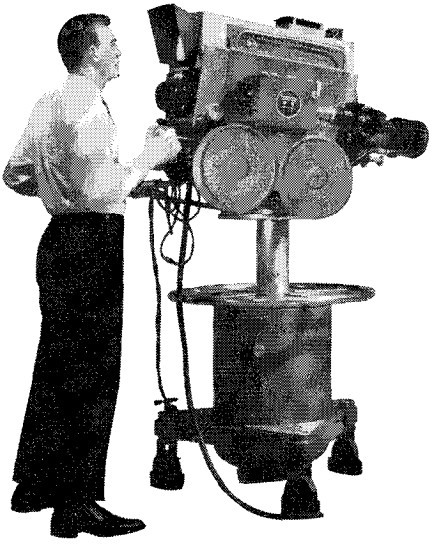
Station	ch	kW/Pol		Station	ch	kW/Pol	
Paganella	21	3/0.6	H	Firenze	29	5.1/1.02	H
Magnano	21	1/0.2	H	Como	29	1.5/0.3	H
Udine	22	150/30	H	Torino	30	200/40	H
M. Penice	23	1800/360	H	Pescara	30	30/6	V
M. Faito	23	1400/280	V	M. Serpeddi	30	25/5	H
M. Luco	23	20/4	H	Catanzaro	30	3/0.6	H
M. Argentario	24	250/50	V	Sondrio	30	2.4/0.48	H
M. Lauro	24	200/40	H	Sassari	30	2.25/0.45	V
Gorizia	24	4.8/0.96	V	Bertinoro	30	1.6/0.32	H
L. Aquila	24	3/0.6	H	M. Peglia	31	200/40	H
M. Venda	25	1000/200	H	Trieste	31	25/5	H
M. Caccia	25	400/80	H	S. Vicent	31	16.5/3.3	H
M. Ortobene	25	2.4/0.48	V	M. Vergine	31	15/3	H
Gambarie	26	200/40	V	Trapani	31	4.8/0.96	V
Velletri	26	48/9.6	H	La Spezia	31	2/0.4	V
M. Conero	26	20/4	H	M. Franca	32	700/140	H
Milano	26	15/3	H	M. Beigua	32	60/12	H
M. Sambuco	27	200/40	H	M. Limbara	32	20/4	H
M. Serra	27	200/40	H	M. Soro	32	15/3	H
P. Badda Urbara	27	200/40	H	P. Corniale	32	3/0.6	H
M. Pellegrino	27	40/8	V	M. Nerone	33	200/40	H
Cima Penegal	27	7.65/1.53	H	Potenza	33	3/0.6	H
Terminillo	27	3.2/0.64	H	Teramo	33	2.4/0.48	V
Roma	28	150/30	H	Benevento	33	2/0.4	H
M. Scuro	28	30/6	H	M. Cammarata	34	200/40	H
Cagliari	28	9.6/1.92	V	Col Visentin	34	10/2	H
Catania	28	3/0.6	H	Col de Courtil	34	5.4/1.08	H
Portofino	29	1000/200	H	Sanremo	34	2.4/0.48	H
M. Favone	29	20/4	H	Terni	34	2.4/0.48	H
Reg. Calabria	29	9/1.8	H				

+18 low power st's less 1kW.
D.Prgr: Sun 18.00–19.25; 21.05–23.30(approx). W 21.05–24.00(approx).
Link connections with foreign countries: Italy-France: Milano–Monte Bignone-Pic de l'Ours – Italy-Switzerland: Milano-Monte Generoso-Uetliberg – Italy-Yugoslavia: Trieste-Monte Nanos-Ljubjana – **Publ:** Radiocorriere, weekly.

TELE LUXEMBOURG (Comm.)

FI: By adv – **Addr:** See radio – **L.P:** Dir. Gen: M. Felten. Secr. Gen: G. Graas. Dir. Prgr: J. Luc.
French Prgr: Def 819
Stations: *Satellites
Dudelange ch7 100/20kW H, Clervaux ch9 3/0.75W H, Echternach ch9 0.25/0.06W H*, Diekirch ch9 3/0.75W H,* Vianden ch5 0.5/0.012W H,* Wiltz ch9 1/0.25W H*.

THE REVOLUTIONARY GEMINI TAPE/FILM SYSTEM



NOW AVAILABLE TO TV STATIONS and VIDEO TAPE PRODUCERS

GEMINI is a fully perfected system which produces simultaneous, direct 16mm film during videotape production. GEMINI replaces the kinescope with a dependable, high quality motion picture film. Developed by MGM Telestudios, the GEMINI system uses a 16mm camera unit mechanically and optically coupled to the TV camera. No special lighting is required. Normal good television lighting yields good GEMINI film. If proper, simple procedures are followed, the picture on the TV monitor will faithfully be reproduced on 16mm film. Our exclusive Edilite system, feeding off the tally lights, marks the film with a line of light when the camera is "taken." Most editing, therefore, becomes automatic in a zero cut printer, and does not require the physical cutting of the film.

Every Television broadcaster, studio and producer that uses electronic cameras has a need to record a portion of his total production. Videotape supplies this need in many cases. However, the cost of videotape equipment, stock and handling represents a financial burden in many situations. Particularly is this true where programming is to be widely distributed within and outside the country, such as in the case of producers of entertainment programs, educational material, industrial features, commercials, training programs, etc.

Also, foreign distribution of videotape is generally impractical because of differences in technical standards throughout many countries of the world. However, every TV station in the world is equipped to use 16mm film, and regular projection equipment for group screenings is universally available and commonplace. The GEMINI system fulfills this recording and distribution need with economy, dependability and quality, backed by the reputation of the world's foremost production organization.

GEMINI

MGM TELESTUDIOS, INC. SPECIAL PRODUCTS DIVISION
550 FIFTH AVE., NEW YORK, N.Y. 10036
A SUBSIDIARY OF METRO-GOLDWYN-MAYER, Inc.

MGM TELESTUDIOS, INC., SPECIAL PRODUCTS DIVISION, 550 FIFTH AVE., NEW YORK, N.Y. 10036

☐ Gentlemen: Please send me information about the GEMINI system including a complete brochure.

☐ Without obligation, I would like to have an MGM Field Engineer call upon me to discuss the GEMINI system. WRTH

NAME_____ POSITION_____

COMPANY_____

TELEPHONE NO._____

STREET_____ STATE_____ ZIP CODE_____

D.Prgr: Sun, Thurs, Sat: 16.00–21.30, Mon, Tues, Wed, Fri: 18.00–21.30.
Ampex Videotape, USA – Fernseh G.m.b.H, Germany and PYE, GB: OBV.

MALTA

MALTA BROADCASTING AUTHORITY

an independent Authority, to regulate and supervise radio and television broadc. in Malta with power to prescribe and produce prgr's – **Addr:** 12. Old Treasury Street, Valletta. **Cable:** Broadcasts. **Te:** Ce 21281 – **L.P:** see radio.

THE MALTA TELEVISION SERVICE LTD. (Comm.)

A subsidiary of Rediffusion Ltd, London (Priv. Comm.). **Fi:** Adv. revenue and contributions for certain prgrs. prescribed by Malta Broadc. Authority.
Addr: P.O. Box 384, Gwardamanga. **Cable:** Television Malta. **Te:** Ce 25051 – **L.P:** Gen. Mgr: E.A. Hamilton-Hill, O.B.E. Mgr: W.A. Fenton. Chief Eng: A.J. Bartolo.
Station: ch E10 4.8/1.2kW H – **D.Prgr:** 17.00–21.00.
Pye TVT, GB: Studio equip – The Marconi Company Ltd, GB: 1×2, 1×0.5kW-tr, studio equip.

MONACO

TÉLÉ MONTE-CARLO (Comm.)

FI: By adv – **Addr:** 16 Blvd. Princesse Charlotte, Monte-Carlo. **Cable:** Tele Carlo. **Te:** 305940 – **L.P:** Dir. Gen: J. Frydman. Secr. Gen: J.F. Micheo.
Stations: ch F2, F10 50/12.5kW H – **D.Prgr:** D 18.30–22.00 – Monoscope identification W 14.00–16.00.

NORWAY

NORSK RIKSKRINGKASTING: see page 125

POLAND

POLSKIE RADIO I TELEWIZJA (Go.)

FI: By state – **Fee:** 40 zl per month. – **Addr:** Telewizja, Plac Powstańców 7, Warszawa. **Cable:** Telewar. **Te:** 263093. **Telex:** 81421 – **L.P:** Pres: W. Sokorski. Vice Pres: A. Walatek. Vicepres. Engineering: K. Kozlowski. Dir. Prgr: S. Stefanski. Chief Eng: R. Dzwonik. Film Buyer: W. Jankowski.
Main Stations: Pol. H. ch OIRT.

	ch	kW		ch	kW
Bydgoszcz	1	100/20	Poznan	9	100/20
Warszawa	2	100/20	Lublin	9	100/20
Zielona Gora	3	200/40	Krakow	10	200/40
Olsztyn	6	8/1.6	Gdánsk	10	100/20
Lódz	7	2.5/0.5	Zgorzelec	11	0.8/0.16
Katowice	8	225/56	Wroclaw	12	123/25
Koszalin	8	7/1.4	Szczecin	12	100/20
Bialystok	8	100/20	Rzeszów	12	100/20
Satellite Stations:	**ch**	**W**		**ch**	**W**
Kielce	1	1.8kW	Lubán	9	4
Kalisz	2	20	Swieradów	9	3
Dzialoszyn	3	60	Duszniki	10	4
Kamienna Góra	3	5	Jelenia Góra	10	40
Krynica	3	4	Czarnków	11	6
Slupsk	3	20	Radom	11	7.5
Wloclawek	4	40	Tomaszow Mazowiecki	11	40
Konin	5	45	Zakopane	12	20
Nowy Sacz	6	15	Zywiec	12	70
Nowa Ruda	7	2			
Klodzko	8	4			

D.Prgr's: 08.00–10.00, 16.00–22.00.
Link connections: Warszawa, Gdánsk Kaliningrad/USSR/ – Warszawa, Olsztyn – Warszawa, Bydgeszcz, Koszalin – Warszawa, Lódz, Katowice, Wroclaw, Poznan, Zielena Góra, Szczecin – Wroclaw, Zvivina/Czechoslovakia/ – Wroclaw, Lugstein/DDR/ – Katowice, Kraków, Rzeszów – Warszawa, Bialystok – Warszawa, Lublin – Lódz, Poznan. – Wilh. Franz KG, Germany: EMT studio equip.

PORTUGAL

RTP–RADIOTELEVISÃO PORTUGUESA S.A.R.L. (Comm.)

Port. Go: ½ of the shares – **FI:** License payments and adv – **Fee:** 360$ 00 – **Addr: Head office:** Rua de S. Domingos (à Lapa), 26 Lisboa. **Studio in Lisboa:** Alameda das Linhas de Torres, 44, **Porto:** Vila Nova de Gaia. **Cable:** Telvisão. **Te:** 666134 – **L.P:** Dir's: E. Matos Correia (Prgr), F. Conceição (Adm). Dir. Tec: B. Machado. Operations Mgr: Alenquer. Film Buyer: C. Assis de Brito. Head External Rel. Div: Dr. A. Bivar.
Stations: ch E: Lisboa 7 100/20kW H – Porto 9 100/20kW H – Montejunto 6 1/0.2kW H – Lousa 3 60/12kW H.
Relay st's: Monchique ch5 6/1.2kW H – Marofa ch5 1/0.2kW H – Bornes ch7 0.25/0.05 H – Marão ch6 0.25/0.05 H – Nogueira ch11 0.04/0.008 H – Evora ch8 1/0.2W H – Beja ch10 0.5/0.1W H – Odemira ch8 1/0.2W H – Arouca ch11 10/2W H –Manteigas ch11 10/2W H.
D.Prgr: W 19.30–24.00, Sun 12.30–13.00, 18.30–24.00.
Ampex Videotape, USA.
Telefunken AG, Germany: delivered studio equip (recorders).

RUMANIA

RADIODIFUZIUNEA TELEVIZIUNEA ROMINA (Go.)

Addr: Televiziunea Romîna, Str. Molière 2, Bucharest.
Stations (System OIRT – 625 lines): Pol: H.
Bucharest chR2 80/20kW – Bacau chR1 2/0.6kW – Dobrogea chR10/50/4kW – Timisoara chR9 40/4kW – Cluj chR11 40/4kW – Yassy chR9 40/4kW – Oradea chR3 100/20kW – Hunedoara chR12 40/4kW –
Repeaters: Pitesti chR4 25W, Birlad chR8 10W, Brasov chR3 80W, Craiova chR8 40W, Victoria chR7 20W, Sibiu chR6 20W, Baia Mare chR7 20W, Resita chR4 20W, Dragasani chR5 20W, Rîmnicul Vîlcea chR4 20W.
D.Prgr's: D. exc. Wed 17.00–21.00, Sun also 06.30–10.00. Comm. prgr's are transmitted separately.

The Marconi Company Ltd, G. B, delivered 1 OBV –
Telefunken AG, Germany, delivered studio equip. (recorders).

SPAIN

TELEVISION ESPAÑOLA (Go.)

Addr: Av. de la Habana 77, Madrid – **L.P:** see radio.
Stations: Pol: H.

Name	ch	kW	Name	ch	kW
Madrid	2	200/80	Santiago	4	60/12
Alicante	3	60/12	Sollube	4	60/12
Zaragoza	3	6/1.2	Barcelona	4	25/5
Guadalcanal	4	60/12	Barco de Valdeorras	9	60/12

Rel. st's: 64 from 0.3 to 300W.
D.Prgr (Madrid, Barcelona): 14.45–16.00, 20.00–24.00.

Ampex Videotape USA: Madrid, Barcelona – AKG, Austria: studio equip. (recorders, microphones) Barcelona, Madrid – Pye TVT, GB: Studio equip, OBV.

SWEDEN

SVERIGES RADIO

Swedish TV; run by Sveriges Radio, has the same non-comm. and official status as the broadc. service – **Fi:** by license payments.
Addr: Radiohuset Oxenstiernsgatan 2, Stockholm. **Postal Addr:** Box 955. Stockholm 1. **Cable:** Broadcast. **Te:** 670865 (local 631000) – **L.P:** see radio.
Kungl. Telestyrelsen (The Telecommunication Administration) has the responsibility for the distribution of the prgr's produced by Sveriges Radio and has also charge of the collection of license fees – **Addr:** & **L.P:** see radio.
Stations: chE, Po: H, kW (E.R.P).s) =satellite.

Name	ch	kW	Name	ch	kW
Anderstorp(s)	8	0.15 V	Laisvall(s)	7	0.01
Arjeplog(s)	9	0.15 V	Linköping	9	1
Arvidsjaur	5	60	Loffstrand(s)	4	0.15 V
Björkliden(s)	9	0.15 V	Lycksele	8	30 V
Boden	4	60	Långå(s)	7	0.01
Bollnäs	6	15	Malmö	10	1
Borangen(s)	3	0.01	Malung(s)	5	0.15 V
Borlänge	10	60	Mjällom(s)	8	0.15 V
Borås	6	3	Moliden(s)	10	0.15 V
Bäckefors	8	60	Mora	8	10 V
Emmaboda	8	60	Motala	7	3
Enafors(s)	8	0.15 V	Moudoslompolo(s)	4	0.15 V
Falun(s)	5	0.01 V	Mölndal(s)	7	0.01 V
Filipstad(s)	9	0.15	Nolby(s)	7	0.001W
Funäsdalen(s)	10	0.15	Norrköping	5	60
Grebbestad(s)	6	0.15 V	Nässjö	10	60
Gäddede(s)	6	0.15	Oscarshamn(s)	5	0.15
Gällivare	9	60	Pajala(s)	7	60
Gävle	9	60	Porjus(s)	4	0.01
Göteborg	9	60	Ragunda(s)	10	0.15 V
Halmstad	7	60	Ronneby(s)	7	0.001 V
Haparanda	8	60	Satisjaure(s)	5	0.001 V
Hudiksvall(s)	10	0.15 V	Seitevare(s)	7	0.15 V
Hultsfred(s)	9	0.15	Skellefteå	6	10
Hälsingborg	9	1	Skövde	3	60
Härnösand(s)	9	0.15	Sollefteå	7	60
Höljes(s)	4	0.001	Sollefteå/Hallst(s)	10	0.15 V
Hörby	2	100	Stockholm	4	60
Idre(s)	10	0.15	Stordalen(s)	7	0.15 V
Jokkmokk(s)	7	0.01	Storuman	10	60
Jönköping(s)	8	0.15	Strömstad(s)	5	0.15
Kallrör(s)	6	0.01 V	Stöde(s)	10	1WV
Karlshamn(s)	3	0.15 V	Sundsvall	5	60
Karlskrona	9	3 V	Sunne	7	60
Karesuando(s)	10	0.15	Sveg	3	60
Karlstad	5	1 V	Svinesund(s)	2	0.01
Kiruna	6	60	Sysslebäck(s)	10	0.15 V
Kisa(s)	4	0.15 V	Särna(s)	7	0.15 V
Kramfors(s)	10	0.15	Torneträsk(s)	4	0.15 V
Kungshamn(s)	5	0.15 V	Torpshammar(s)	9	0.15
Kälarne(s)	9	0.15 V	Transtrand(s)	6	0.15 V
Köpmanholmen(s	9	0.15 V	Tranås(s)	8	0.15 V

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Name	ch	kW	Name	ch	kW
Trollhättan	7	1	Vitsand(s)	10	1W V
Tänndalen(s)	6	0.01	Vännäs	2	60
Tännas(s)	5	1W	Västervik	6	25
Tärnaby(s)	6	0.15	Västerås	8	10
Täsjö	9	60	Ånge	8	1.5
Uddevalla	2	5 V	Åre(s)	10	0.15 V
Uppsala	6	3	Örebro	2	60
Varberg	10	1 V	Örnsköldsvik	6	3 V
Vassijaure(s)	3	0.15	Östersund	4	60
Visby	9	25	Östhammar(s)	10	0.15 V
Vislanda	5	5 V			

TV-stations under constructions: [1]) before July 1st 1965.
s)=satellite – *=Increase power.

Bollnäs*	6	60	1) Virserum(s)	2	0.15 V
1) Frederiksberg(s)	5	0.01	Ånge*	8	15
1) Hassela(s)	2	0.01	1) Alvdalsklitten(s)	10	0.01 V
1) Smedjebacken(s)	6	0.001	1) Alvdalsåsen(s)	2	0.01
1) Smålands Taberg(s)	7	0.01	1) Överkalix(s)	5	0.15 V
1) Trelleborg	7	0.01			

D.Prgr's: Evening and Sun times are approx.
Sun: 14.00–21.45; Mon: 08.30–12.30*; 13.00–15.00°; 17.00–22.00; Tues: 08.30–12.30*, 15.30–15.50**, 18.00–21.30; Wed: 08.00–08.30*** 17.00–17.30°, 18.00–21.35; Thurs: 13.00–15.00°, 17.30–18.00***, 18.15–21.30; Fri: 08.30–12.30*, 15.30–15.50***, 18.00–22.00; Sat: 13.00–15.00, 17.30–17.50***, 18.00–21.35.
* for schools; ** for children; *** for small children; ° repeats for schools.

TV-tr's: Laboratoire Général des Télécommunications (L.G.T.): Arjeplog, Gravarne, Höljes, Idre, Karesuando, Karlshamn, Kisa, Kälarne, Laisvall, Malung, Mjällom, Moliden, Muodoslompolo, Mölndal, Nolby, Ronneby, Satisjaure, Seitevare, Stöde, Svinesund, Transtrand, Tärnaby, Vitsand – Magneti Marelli: Anderstorp, Hudiksvall, Hultsfred, Härnösand, Jönköping, Kramfors, Ragunda – Marconi: Arvidsjaur, Björkliden, Boden, Borlänge, Bäckefors, Emmaboda, Enafors, Grebbestad, Gäddede, Karlstad, Köpmanholmen, Loffstrand, Lycksele, Motala, Nässjö, Skellefteå, Sollefteå/Hallsta, Stordalen, Storuman, Strömstad, Sundsvall, Sunne, Sysslebäck, Torneträsk, Torpshammar, Tranås, Vassijaure, Visby, Vislanda, Vännäs, Västervik, Västerås, Ånge, Åre, Östersund, Östhammar – Philips: Bollnäs, Borås, Gällivare, Gävle, Göteborg, Halmstad, Haparanda, Hälsingborg, Hörby, Karlskrona, Kiruna, Linköping, Malmö, Mora, Norrköping, Pajala, Skövde, Sollefteå, Sveg, Trollhättan, Täsjö, Uppsala, Varberg, Örebro, Örnsköldsvik – Siemens: Stockholm – Standard: Uddevalla – Compagnie Générale de Télégraphie sans Fil (C.S.F.): Falun – RCA: Särna.

SWITZERLAND (Confederation)

SWISS TELEVISION (Go.)

Fi: By the proceeds from the TV license-fees, divided between the SBC and PTT at the rate of 70:30 per cent and from February 1st, 1965, by the proceeds from commercial television: 12 minutes per weekday at the utmost in the early evening, at the rate of 6000 frs a minute – **Addr:** Swiss Television, 26 Kreuzstrasse, Zürich. **Cable:** Telesuisse. **Te:** Zürich (051) 34.80.30, Geneva (022) 24.72.50, Lugano-Besso (091) 32021 – **L.P:** Dir. Swiss TV: E. Haas. Head German Prgr: Dr. G. Frei. Head French Prgr: Dep. Dir R. Schenker. Head Italian Prgr: F. Marazzi. Head Tec: H. R. Züst. Head Adm: R. Wydler. Head Prgr. Coordination: F. R. Tappolet.
Stations: ch E. Po: H.

German Prgr:	ch	kW		ch	kW
Bantiger	2	30/6	Säntis	7	15/3
Niederhorn	12	5/1	Uelitberg	3	60/12
Rigi	6	30/6	Valzeina	10	5/1
St. Chrischona	11	50/10			
Boosters: PTT:	**ch**	**W**	**Private**	**ch**	**W**
Bönigen	5	120/24	Attinghausen	11	25/5
Buchserberg	8	90/18	Feldis	6	40/8
Davos	8	25/5	Gornergrat	12	9/1.8
Glarus	11	20/4	Luven	7	15/3
Gotschnagrat	11	30/5	Ruschein	9	110/22
Klewenalp	10	60/12	Trans	8	50/10
Männlichen	10	30/6	Wattenwil	12	32/6.4
St. Gallen	10	10/2	Zermatt	5	6/1.2
Sool	9	32/6.4			
Wattenwil	6	45/9			
Ziegelbrücke	5	25/5			
French Prgr:	**ch**	**kW**		**ch**	**kW**
Bantiger	10	2/0.4	La Dôle	4	144/28.8
La Chaux de Fonds	9	4.5/0.9	Les Ordons	7	6/1.2
Boosters: PTT	**ch**	**W**		**ch**	**W**
Delémont	12	12/2.4	Ste. Croix	7	4/0.8
Mt. Pèlerin	11	180/36	Val de Travers	5	50/10
Moron	12	50/10	**Private:**		
Moutier	10	12/2.4	Verbier	8	5/1
Ravoire	9	900/180	Veysonnaz	6	400/80

Italian Prgr:	ch	kW		ch	kW
Mt. Ceneri	5	4.5/0.9	Mt. S. Salvatore	10	10/2
Boosters: PTT	**ch**	**W**		**ch**	**W**
Cardada	12	70/14	Mt. Morello	6	30/6
Castione	9	70/14	P. Matro	6	81/16
Grono	11	40/8	Personico (priv)	8	2/0.4
Iragna	2	5/1			

D.Prgr: German: Sun 15.00–21.30 (in the morning: twice a month rlg. sermon); Mon 18.00–21.30, Tues 18.00–21.45, Wed 15.45–17.00, 18.00–21.45, Thurs 16.30–17.30, 18.00–21.30, Fri 18.00–21.45, Sat 13.00–14.00 (for Italian workers, repeatet 17.00–18.00), 16.00–22.00 – **French:** Sun 15.30–21.45 (in the morning: twice a month rlg. sermon), Mon, Tues, Fri 18.00–21.45, Wed 15.45–17.00, 18.00–21.45, Thurs 16.30–17.30, 18.00–21.45, Sat 13.00–14.00 (for Italian workers), 16.00–22.00 – **Italian:** Sun 15.30–21.35 (in the morning: twice a month rlg. sermon), Mon–Fri 18.25–21.35, Sat 13.00–14.00 (for Italian guest workers), 17.00–21.45.

Relay facilities: A microwave link across the Alps. It runs from Gempen, near Bale (northern border) to Froburg-Bantiger-Jungfrau (12.200 ft.) – Mt. Generoso (southern part of Switzerland) on the one side, and the German and Italian TV systems on the other side – A second microwave link runs from Uetliberg-Froburg-Bantiger-Romont – La Dole. It has been extended to Cuiseaux for the programme exchange with France – Third link: Uetliberg–Säntis–Pfänder (Austria)

Fabbrica Italiana Apparecchi Radio SpA, Italy, has sold different TV repeaters, antennas, amplifiers to the following st's: Bantiger, Mt. Morello, Ravoire, St. Gallen, Val de Travers – The Marconi Company Ltd, GB, delivered OBV(2) – Brown Boveri, Switzerland, delivered; Uetliberg 2×10/2kW, La Dole 10/2kW, Rigi 2×4/0.8kW, Säntis 1.5/0.3kW, S. Salvatore 2×1.5/0.3kW – Sondor, Switzerland: delivered studio equip. (Zürich, Geneva, Lugano).
Ampex Videotape, USA (Geneva, Zürich).
Telefunken AG, Germany, delivered studio equip (recorders).
Pye, TVT, GB: Studio equip, OBV.

U.S.S.R.

THE SOVJET TELEVISION (Go.)

Addr's of the most important TV studios: Tsentralnaja studija televidenija Moskva, ul. Sjabolovka 53 (Dir: I. Inozemtsev) – Leningradskaja studija televidenija Leningrad ul. Malaja Sadovaja 2 – Kijevskaja studija televidenija Kijev, Krestjatik 24 – Minskaja studija televidenija Minsk, ul. Kalinina 6 – Rizjskaja studija televidenija Riga, ul. B. Nometnu 62 – Tallinskaja studija televidenija Tallin, ul. Krejtsvalda 14 – Bakinskaja studija televidenija Baku, Parkovajaul – Tasjkentskaja studija televidenija Tasjkent, ul. Navoi 69 – Jerevanskaja studija televidenija Jerevan, pr. Ordzjonokidze 22 – Tbilisskaja studija televidenija Tbilisi pr. Rustaveli 12 – Vilnjusskaja studija televidenija Vilnius, studija televidenija – Alma-Atinskaja studija televidenija Alma-Ata, studija televidenija – Kisjinjovskaja studija televidenija Kisjinjov, studija televidenija.

Stations: Television Centres: Channel R. Def. 625. Po: H.
Moscow ch1 15/4kW – Moscow ch3 7.5/3kW – Moscow ch8 (colour). **D.Prgr: ch1:** W: 09.00–10.00, 14.30–20.00(approx). Sun 09.00–19.45 – **ch3:** D 15.40–17.00(Sat 18.00) – **ch8:** Thurs 12.30–13.00.
RSFSR: Abakan ch1 – Armavir ch1 – Astrakhan ch1 – Barnaul ch3 – Biysk ch1 – Bryansk ch2 – Vorkuta ch3 – Voronezh ch1 – Vladivostok ch1 – Gorkiy ch2 – Grozny – Izhevsk ch2 – Irkutsk ch3 – Kazan ch1 – Kaliningrad ch4: 15.00–19.30 – Khabarovsk Kemerovo ch5 – Kirov ch3 – Komsomolsk ch1 – Krasnodar ch5 – Krasnojarsk ch2 – Kuybyshev ch3 – Leningrad ch1 15/4kW – Magadan ch1 – Makhachkala – Murmansk ch3 – Nalchik ch1 5/2kW – Novosibirsk ch2 – Norilsk ch1 Omsk ch1 5/2kW – Penza ch4 – Perm ch1 – Petrozavodsk ch2 5/2.5kW – Pyatigorsk ch2 – Rostov ch1 – Rybtsovsk ch2 – Saratov ch1 – Sverdlovsk ch3 5/2kW – Sochi ch1 – Volgograd ch4 – Novomoskovsk ch5 – Tomsk ch1 5/2kW – Tyumen ch2 – Ulyanovsk ch5 – Ufa ch1 5/2kW – Cherepovets ch5 – Chelyabinsk ch4 15.00–18.00 – Yaroslave ch2 – Kherson, Konotop, Kurgan, Raychkinsk, Uhkta, Urgench, Yoshar-Ola.
Ukranian SSR: Dnepropetrovsk ch5 5/2kW – Zaporozhye ch6 – Kiev ch2 15/4kW 15.00–20.00(Sat also 10.30–11.00, 13.30–14.00) – Lugansk ch2 – Lvov ch1 – Nikolayev ch2 – Odessa ch5 15/4kW – Donetsk ch4 15/4kW – Simferopol ch3 – Sevastopol-Kharkov ch3 7/3.5kW – Kherson ch3 2/1kW – Vinnitsa – Yuzhno – Sakhalinsk. **White Russian SSR:** Gomel ch3 15.00–20.00 – Vitebsk – Minsk ch1 5/2kW. **Kazakh SSR:** Alma-Ata ch3 5/2kW 12.30–17.00(Sun also 05.00–06.30) – Dzhezkazgan ch1 – Karaganda ch1 – Petropavlovsk – Ust-Kamenogorsk ch1 – Kustanai – Pavlodar – Rudno – Tselinograd.
Azerbajan SSR: Baku ch3 5/2kW. **D.Prgr:** 14.05–18.30 – **Lithuanian SSR:** Vilnius ch4 15/4kW – **Armenian SSR:** Yerevan ch1 5/2kW V – **Moldavian SSR:** Kichinev ch3 15/4kW 16.00–20.00 – **Latvian SSR:** Riga ch3 5/2kW – **Estonian SSR:** Tallinn ch2 15/4kW – **Uzbek SSR:** Tashkent ch3 5/2.5kW 12.00–16.00 (News 12.00, 15.00) – **Georgian SSR:** Tbilisi ch4 5/2kW – **Kirghiz SSR:** Frunze ch1.
Tadjik SSR: Dushanbé – Turkmenian SSR: Ashkhabad.

Projected Stations: Television Centres:
RSFSR: ch1 Barnaul (1964) – Berezniki – UlanUde – Yoshkar Ola – Magnitogorsk ch3 – Petropavlovsk Kamchatka – Khabarovsk – Arkhangelsk – Ordzhonikidse – Cheboksary – Yakutsk – Orenburg – Syktyvkar – Stavropol – Chita. **Ukrainian SSR:** Stanislav – Novo – kuznetsk. **Kazakh SSR:** Aktyubinsk ch1 – Balkhash. **Uzbek SSR:** Nukus. **Turkmen SSR:** Ashkhabad ch1 – Nebit Dag – Krasnovodsk. **Azerbajan SSR:** Nakhichevan – Kirovobad.
The Marconi Company Ltd, G.B, delivered OBV(2) to Moscow, OBV) (1) to Leningrad. Pye TVT, GB: studio equip, OBV.

YUGOSLAVIA

RADIO TELEVISION YOUGOSLAVE (Go.)

FI: By license payments – **AD:** 45 mins. per week.
Addr's: Radiotelevision Yougoslave: 70B, Kidriča, Beograd. **Te:** 43-693. **Telex:** 01-259 – **Radiotelevision Beograd:** 2, Hilendarska Beograd. **Te:** 24.214. **Telex:** 01-288 – **Radiotelevision Zagreb:** 4, Jurišlićeva, Zagreb. **Te:** 37-741. **Telex:** 02-126 – **Radiotelevision Ljubljana:** 17, Tavčarjeva, Ljubljana. **Te:** 31.922. **Telex:** 03-102 – **L.P: Radiotelevision Yougoslave:** Pres. Adm. Com: Z. Vukovič. Secr. Gen: Dr. I. Pustišek. Head for Rel: Mrs. O. Vojvodič. Pres. Prgr. Com. TV: D. Fortic. Secr. Prgr. Com. TV: M. Milosavljevic. Pres. Tech. Com: S. Rojec. **Radiotelevision Beograd:** Dir. Gen: Z. Vukovči. Dir. Prgr. TV: A. Stefanovic, A. Vitorovic. Dir. Tec: R. Žižič. **Radiotelevision Zagreb:** Dir. Gen: I. Bojanic. Dir. Prgr. TV: T. Golubović. Dir. Tec: V. Trs. **Radiotelevision Ljubljana:** Dir. Gen: B. Mikos. Dir Prgr. TV: D. Fortic. Dir. Tec: Eng. S. Pernuš.

Stations in operation (625 lines, sound: FM, Po, H chE).

	ch	kW/W (ERP)		ck	kW/W (ESP)
Beograd			Skalnica	11	35/7W
Avala	6	100/200	Celje	8	35/7W
Crveni Cot	10	35/8	Pohorje	11	2.4/0.6
Jastrebac	5	100/20	Piran	11	10/2W
Crni Vrh	11	35/7	Zagorje	8	0.25W
Ovcar	8	1/0.2	Idrija	8	10/4W
Majdanpek	8	2/0.4W	Kum II	3	0.3/0.06
Tupiznica	10	4/1	Plesivec	6	0.6/0.18
Tara	7	5/1W	+25 lowpower repeater st's.		
Uzice	6	5/1W	**Titograd**		
Sevojno	9	0.5/0.1W	Lovcen	10	5/1
Goles	7	35/7	Niksic	8	10/2W
Kopanik	3	50/10	Vrmac	8	0.5/0.1W
Titovo Uzice	8	5/1W	Budva	8	0.5/0.1W
Zagreb			Bjelasica	12	0.6/0.12
Sljeme	4	20/4	**Sarajevo**		
Psunj	5	40/10W	Sarajevo	8	16/4W
Kozjak	6	40/10W	Bjelasnica	6	0.5/0.1
St. Gric	7	40/10W	Majevica	5	16/4W
Srdj	7	40/10W	Bihać	11	5/1W
Omiš	9	10/4W	Foča	9	5/1W
Sljeme	9	100/20	Goražde	6	5/1W
Ucka	11	100/20	Konjic	10	5/1W
Labistica	4	20/4	Livno	6	100/20W
Skopje			Mostar	6	5/1W
Solunska Gl.	6	150/75W	Tuzla	7	16/4W
Pelister	10	60/30W	Banovici	8	0.5/0.1W
Vodno	9	30/15W	Kozara	6	0.5/0.1
Ljubljana			Zenica	6	80/20W
Ljubljanagrad	21	5/1W	Vares	10	0.5/0.1W
Krvavec	5	6/1.2	Zvornik	7	4/1W
Kum	3	6/1.2	Zavidovici	6	0.5/0.1W
Nanos	6	40/8	Ljubija	10	4/1W
Velenje	5	5/1W	Vlašic	11	100/20
Trzic	6	0.15/0.03W	+8 lowpower repeater st's.		
Kovor	9	5/1W			
Jesenice	8	5/1W			

D.Prgr: Common Prgr. for Beograd, Zagreb, Ljubljana: D. exc. Tues 17.30–22.30 – **Test-tr's:** Beograd, Zagreb, Ljubljana – daily one h before the beginning of tr's.

Fabbrica Italiana Apparecchi Radio SpA, Italy, has sold different TV repeaters, antennas, amplifiers to the following st's: Bjelasnica, Banovici, Borasnica, Kozora, Leotar, Majevica, Mostar, Pljesivica, Sarajevo Skopje, Tusnica, Tuzla, Velez.

The Marconi Company Ltd., GB: 50 W-tr. (Skopje).

WANTED
Subscription Agencies in countries other than the United States. Write for full details.
World Radio TV Handbook Co. Ltd.
Sundvej 6, Hellerup, Denmark.

AFRICA

ALGERIA

RADIO ALGERIE (Go.)

Fee: 65.00 DA – **Addr. & L.P:** see radio.
Stations: Def. 819: Algiers ch11 20/5kW, H d – Oran ch8 12.5/1.25kW H – Tizi-Ouzou ch7 0.1/0.025kW (repeats ch11 Algiers) – Chrea ch6 (Satellite) 5/1.25kW H – Constantine ch7 0.2/0.05kW H.
D.Prgr's: 19.00(Sun 14.30, Thurs 15.00)–23.00.
St's under construction: Algiers ch11 2/0.4kW, Constantine ch7 10/2 kW, Oran ch10 2/0.4kW, Setif ch5 10/2kW, Akfadon ch10 10/2kW, Chiea ch9 10/2kW, Orleansville ch6 10/2kW, Tersala ch8 10/2kW.

CANARY ISLANDS (Spanish)

TELEVISION ESPAÑOLA EN CANARIAS

Addr: Rambla del General Franco 59, Santa Cruz de Tenerife, or Casa del Marino, Las Palmas de Gran Canaria. **Te:** Tenerife 1198, Las Palmas 41422 – **L.P:** Dir: D. M. de Zavala Castella.
Station: Santa Cruz de Tenerife chE4.

CONGO (Rep.)

RADIODIF. TELEVISION CONGOLAISE (Go.)

Addr. & L.P: see radio.
Station: (System D 625 lines): 199.25/205.75Mc 2kW H.
D.Prgr: Thurs, Fri 17.30–20.00, Sat 17.00–20.00, Sun 17.30–20.30. For Schools: Mon, Wed, Thurs, Fri 08.00–09.00.

PYE TVT, G.B: studio equip.

EGYPT

U.A.R. BROADCASTING CORPORATION OF CAIRO

Fi: By license payments, state subsidy and adv – **Fee:** 5£ (Egyptian) – **Addr:** TV Bldg, Cornish Rd, Cairo. **Cable:** Kahivision. **Te:** 812070 – **L.P:** see radio.
Stations: Ch E; Sound FM; Vision AM (CCIR Standard).

	ch	kW			ck	kW
Cairo 1	5	100/20	H	Kassassin	9	3.5/0.7 V
Cairo 2	7	20/4	H	Ismailia	6	3.5/0.7 V
Cairo 3	9	20/4	H	Suez	9	3.5/0.7 H
Alexandria 1	6	25/5	H	Bush	11	6/1.2 H
Alexandria 2	9	6/1.2	H	Maghagda	6	6/1.2 H
Mansoura	8	16/3.2	H	El-Minya	9	6/1.2 H
Tanta	10	135/27	H	Mallawi	5	3.5/0.7 H
Assuan	5	12/2.4	H	Qusiya	7	3.5/0.7 H
Port Said	10	25/5	H			

D.Prgr: First Prgr: Cairo 1, Alexandria 1, Mansoura, Kassassin, Ismailia, Suez, Bush, El-Minya, Mallawi, Qusiya: D 09.00–10.15, 14.00–22.00, Fri 08.00–22.00 – **Second Prgr** (Cairo 2, Alexandria 2, Tanta): D 14.00–22.00(Fri 08.00–10.00, 14.00–22.00) **–Third Prgr** (Cairo 3): 16.00–21.00, Assuan: 16.00–21.00.
Projected St's: Damietta ch6 6/1.2kW H – Assiut ch10 6/1.2kW H – Kom-Aumbo ch9 – Edfo ch6 – Essna ch10 – Rayaina ch8, Luxor ch5; all 20/4kW H.

GABON

TELEVISION GABONAISE (Go - educational)

Addr: B.P. 1029, Libreville – **L.P:** Dir. Gen: M. Rawiri. Dir. Tec: M. Valbert – **Station:** Libreville ch III 0.05/0.01kW – **D.Prgr:** Mon, Thurs, Fri 19.00–21.10. Sat 19.15–21.10. Sun 19.15–21.30.

GHANA

GHANA RADIO AND TELEVISION CORPORATJON (Go.)

A Television Sce. with 3 st's of 20kW (ERP) each is expected to be in operation early 1965 (CCIR 625 standards) at Ajangote (chE4), Kisi (chE3), Nkabin (chE2) with studios in Acra.

The Marconi Company Ltd, G.B, delivered TV tr's (1×1, 1×5kW) to Ajangote, Jamasi, Kisi, OBV Accra (2); studio equip.

IVORY COAST

RADIODIFFUSION TELEVISION IVORIENNE (Go.)

Addr: TV House, Blvd. Latreille, Abidjan. **Te:** 23511. **Cable:** RTI Television – **L.P:** Dir. N. Christophe. Dir. Tec: D. Coulibaly.
Stations (System D 625 lines):
Abidjan ch R10 10/2kW H – Bouaflé ch R9 10/2kW V.
D.Prgr: 19.15–21.30.

KENYA

VOICE OF KENYA TELEVISION (Indep.)

Comm, adv (6 mins. per h).
Addr: Box 30456, Nairobi. **Te:** 26653 – **L.P:** see radio.
Stations: chE4 15/3kW H – **Relay st:** chE2 50/10W – **D.Prgr:** D 15.00–19.30 (English, Swahili).

The Marconi Company Ltd, GB, delivered 1×1kW, 1×5kW tr. Hillcrest, 1×3kW tr. Nairobi, ant, studio equip – AKG, Austria, delivered equip. (recorders, microphones).

LIBERIA

LIBERIAN BROADCASTING CORPORATION (Go.)

Addr. & L.P: see radio – **Station:** ELTV ch E6 2.25/0.45kW.
D.Prgr's: 19.45–23.00.

MAURITIUS

MAURITIUS BROADCASTING CORPORATION (Comm.)

Addr. & L.P: see radio – **Stations:** Forest Side ch E4 5/1 kW H, Port Louis (satellite) ch E7 0.3/0.06kW H.
D.Prgr: 14.30–18.00 (from around 1/1 65).
The Marconi Company Ltd, G.B: 1 × 1, 1 × 5 kw tr.

MOROCCO

RADIODIFFUSION TELEVISION MAROCAINE (Go.)

Addr. & L.P: see radio.
Stations: Rabat 187.25/192.75Mc 24/4.8kW H – Casablanca 211.25/216.75Mc 15/3kW H – Marrakech 179.25/184.75Mc 0.3/0.06kW H.
Relay stations: Zerhoun 163.25/168.75Mc 1.2/0.24kW H – Sarsar 203.25/208.75Mc 0.6/0.12kW H – Cap Spartel 171.25/176.75Mc 30/6W H – Fes 211.25/216.75Mc 30/6W H – Chorf 195.25/200.75Mc 30/6W H – Tazekka 195.25/200.75Mc 1/0.2kW H – Kouali 171.25/176.75Mc 1/0.2kW H – Oujda 187.25/192.75Mc 0.5/0.1kW H.
D.Prgr's: 19.30–24.00. **French:** 19.30–21.00. **Arabic:** 21.00–24.00.

MOCAMBIQUE (Port. Ea. Africa)

Television under consideration – installation may commence 1965.

NIGERIA

NIGERIAN TELEVISION SERVICE (NTS - Go, Comm.)

Fi: By state and comm. revenue – **Ad:** Approx. 10% of time – **Addr:** Television House, Victoria Island, Private Mail Bag 12005, Lagos. **Cable:** Nivision. **Te:** 26391 – **L.P:** Man. Dir: G. Roger Bower. Dir. of Prgr's: C. Kolade. Dir. of Eng: J. Burrell. Dir. of Adm: B. Shaw. Comm. Dir: R.H. Lunquist.
Station (System RCA): Lagos ch E10 40/8kW H.
D.Prgr's in English, Yoruba, Ibo, Hausa: 18.00–21.15.

EASTERN NIGERIA TELEVISION (ENTV):

Addr:& L.P: See radio – **Stations:** Enugu ch E2 60kW H, Aba ch E4 60kW – **D.Prgr:** W 17.00–21.30(Sat 23.00).
Pye TVT, GB: studio equip – RCA, USA: tr's aerials, studio equip.

RADIO KADUNA TELEVISION (RKTV)

Addr: RKTV, Box 250, Kaduna, No. Nigeria. **Cable:** Radionorth. **Te:** 2294 – **L.P:** See radio.
Stations: Jaji chE4 40kW H – Kano chE10 25kW H.
D.Prgr: D exc. Sat 18.00–21.00.

WESTERN NIGERIA RADIOVISION SERVICE

Fi, Ad and L.P: see radio – **Stations:** Abafon (Lagos) chE3 15/4kW H – Ibadan chE4 1.5/0.4kW H.
D.Prgr: D. 17.25–21.15 (or 21.30) – **F.Pl:** chE3 60kW(Dec 65), chE4 50kW(June 65) – Oshogbo chE5 50kW(Dec 66), Akure chE11(Dec 67).
The Marconi Company Ltd, G.B, delivered tr's, antennas, OBV.

REUNION

RADIODIFFUSION TELEVISION FRANCAISE (Go.)

Addr. & L.P: see radio – **Stations** (625 lines, system K): St. Denis 207.25/213.75 Mc 50/10W
D.Prgr's: not yet fixed, but tr's to start around Jan 1st, 1965.

SENEGAL (Republic)

TELEVISION DU SENEGAL (Go.)

A TV St. early 1965 at Dakar: 625 lines, CCIR, Band III, chR9 0.05kW V – Later on st's at Thiés (20kW), St. Louis, Kaolack, Ziguinchor.

SIERRA LEONE

SIERRA LEONE TELEVISION (Go.)

Ad: Comm. adv. spots accepted – **Addr:** Ministry of Information, Freetown – **L.P:** Gen. Mgr: V. Hallack, Chief Eng. Designate: A. Khanu. Chief Eng: D.S. Reid – **Station:** ch E2 0.1kW H – **D.Prgr:** Mon–Fri 18.30–22.30. Sat–Sun 18.00–23.00.
Pye TVT, GB: tr. ant, studio equip.

SOUTHERN RHODESIA

SOUTHERN RHODESIA BROADCASTING CORPORATION (Go.)

Addr: P.O. Box 8008, Salisbury – **L.P:** Dir. Gen: J.H. Parry, O.B.E. Gen. Mgr: J. Terry. Chief Eng. M.N. Smuts, B. Sc(Eng) A.M.I.E.E.
Stations: Salisbury chE4 20kW – Bulawayo chE3 3kW.
D.Prgr: W 15.25(Sat 15.00)–21.00.

SUDAN

A Go, comm. st. planned to operate from Khartoum in 1965.

UGANDA (Rep.)

UGANDA TELEVISION SCE. (Comm – operated by Ministry of Inf. Broadc. and Tourism) – **Addr:** P.O. Box 4260, Kampala – **L.P:** Gen. Mgr: G. Blackledge. Dir. Tec: H. G. Toombs.

Station: Kampala ch 5 & 10 60kW H – **D.Prgr:** 15.00–19.00.
A relay network of 5 st's to operate early 1965 (Mbalé, Soroti, Lira, Masaka, Mbarara).
The Marconi Company Co. Ltd, G.B: 1 × 1, 1 × 5 kw tr's to Kampala, Mbale, Soroti, Kimabalu, Masaka, Mbarara.

UPPER VOLTA

VOLTA VISION (Go.)

Addr. & L.P: see radio.
Station (SystemD 625 lines): Ouagadougou 175.25/181.75 Mc0.05kWV.
D.Prgr's: D. exc Sat 19.30–22.00.
Projected: Koudougou 1kW H – Bobodioulasso 1kW H.

ZAMBIA

ZAMBIA TELEVISION (Comm.)

Fi: by adv – **Fee:** £5 (combined radio & TV).
Addr: P.O. Box 1100, Kitwe. **Te:** 3507. Cable: Tee-Vee. Telex: KE 5728 – **L.P:** Gen. Mgr: I. Salmon. Dir. Tec: J.E. Northeast. Prgr. Mgr: J.O. Evens.
Station: Kitwe chE4 13.6/2.71kW H – **D.Prgr:** 15.00–19.30 – **F.Pl:** St. at Lusaka.

ASIA

ADEN (Federation of So. Arabia)

SOUTH ARABIAN TELEVISION SERVICE (Comm.)

Fi: Part advertising, part Go – **Ad:** 16.00–19.30 – **Addr:& L.P:** see radio.
Stations: CCIR Standards, 625 lines: Al-Aineh chE10 0.5kW V, Al-Bargh chE7 0.5kW H – Jabel Muzalkam chE4 0.5kW H – **D.Prgr:** 16.00–19.30. **Testtr's:** D 07.00–09.00, 13.30–15.30.

CAMBODIA

R. CAMBODGE-TELEVISION (Go.)

Addr. & L.P: See radio – **Stations:** Phnom Penh ch8 40/8kW, Bokor ch11 0.8/0.016kW (rel).
Nippon Electric Company, Japan, delivered TV tr. (Phnom Penh) and studio equip.

THE PEOPLES REPUBLIC OF CHINA

Stations:	Vision Mc	Sound Mc		Vision Mc	Sound Mc		Vision Mc	Sound Mc
Peking			Harbin	49.75	56.25	Taiyuan	49.75	56.25
1st Prgr.	57.75	64.25	Shenyang	93.25	99.75	Hofei	85.25	91.75
2nd Prgr.	77.25	83.75	Changch.	57.75	64.25	Nanking	49.75	56.25
Shanghai	93.25	99.75	Canton	57.75	64.25	Wuhan	93.25	99.75
Tientsin	93.25	99.75	Sian	49.75	56.25			

Relay st's: Changli* chR1, Soochow** 57.75/64.25Mc, Tangshan* chR4, Wusih** 57.75/64.25Mc.
* repeating Peking; ** repeating Shanghai.
Experimental st's: Anshan, Changsha, Chengtu (all 57.75/64.25Mc), Chiamsu chR1, Foochow chR5, Fushun chR1, Hekang chR4, Kirin chR1, Kweiyang chR5, Lanchow chR1, Tsinan chR3, Tsitsihar 57.75/64.25Mc.

TAIWAN

NATIONAL EDUCATIONAL TELEVISION STATION (Go.)

Fi: by Go. appropriation – **Fee:** $8.50 – **Addr:** 41 Nan-hai Rd, Taipei. **Te:** 36166 – **L.P:** Dir. Prof. C.C. Liu. Dir. Tec: H.Y. Lee. Prgr. Mgr: T.C. Yü.
Station: NETV chA11 4/2kW – **D.Prgr:** 09.30–15.30.
Planned: 8 low-powered repeater st's.

TAIWAN TELEVISION ENTERPRISE (Comm.)

Addr: 990 Chung Cheng Rd, Taipei. **Cable:** Television – **L.P:** Gen. Mgr: T.S. Chou.
Station: BET31, chA7 5/2.5kW – **D.Prgr:** 10.50–13.00.

CYPRUS

CYPRUS BROADCASTING CORPORATION (Go, Comm.)

Fi.& Addr: see radio – **L.P:** Dir. Gen: V.I. Markides. Pub. Rel. Officer: I. Hadjiossif. Dir. Prgr: G. Mitsides. Dir. Tec: P.T. Astreos.
Stations: Nicosia chE2 1.5/0.3kW H – Mt. Olympus: chE6 40/8kW V – Mt. Sina Oros: chE8 40/8kW V.
D.Prgr: 17.00–20.00(exc. Mon, Thurs) – Test Tr's: W 08.00–10.00.
The Marconi Company Ltd, GB, delivered 1 × 0.25kW, 1 × 0.5kW tr's Pye T.V.T, GB: Tr's studio equip.

HONG KONG (British)

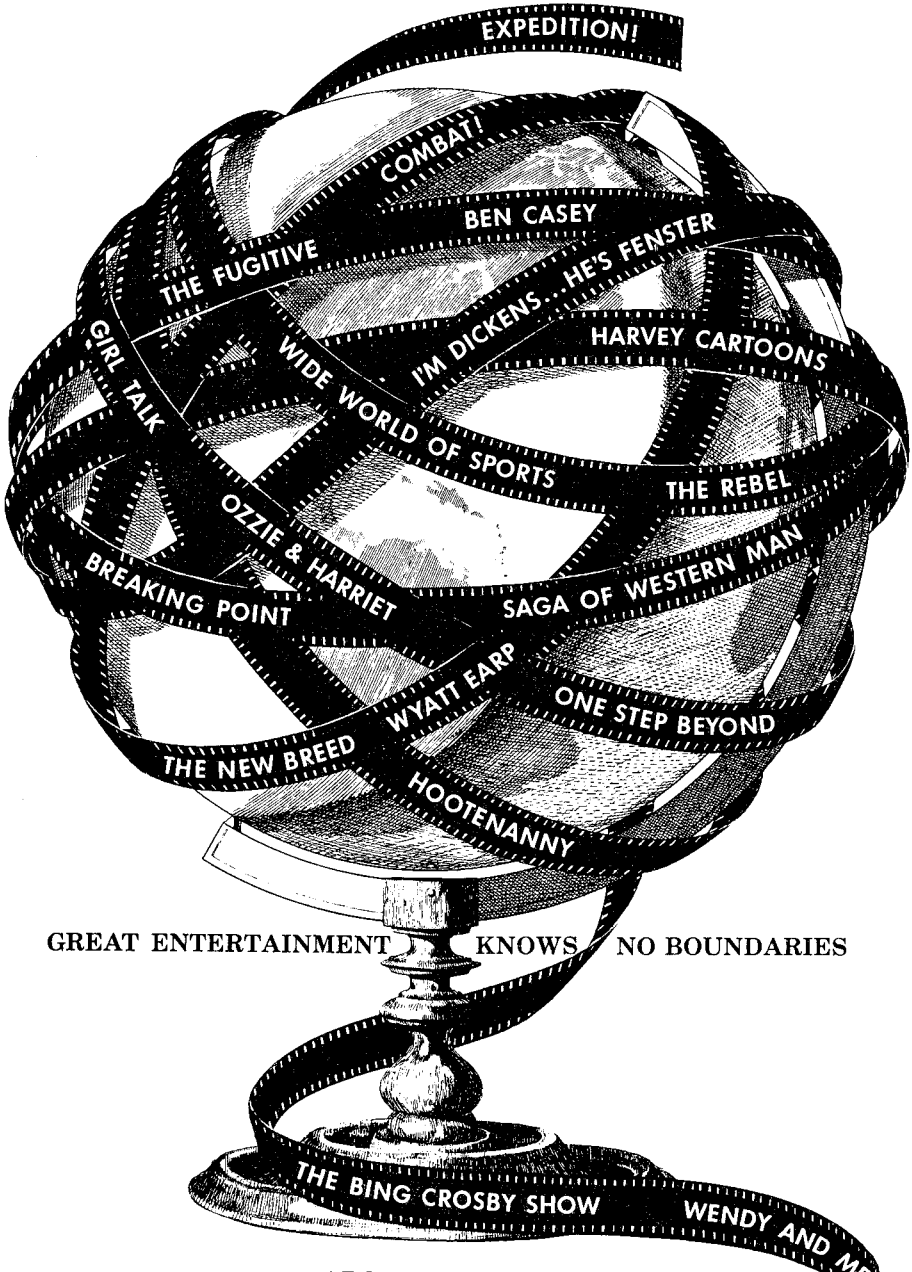
REDIFFUSION TV HONG-KONG (Comm.)

Addr: P.O. Box 121, Hong Kong – Closed circuit 405 line network – **D.Prgr:** Mon–Fri 09.00–16.30, Sat/Sun 06.00–16.30.
Pye T.V.T, GB: Studio equip.

INDIA

ALL INDIA TELEVISION (Go.)

Addr: Television Centre, All India Radio, Akashwani Bhawan, 5th Floor, Parliament Street, New Delhi 1. **Te:** 30101 – **L.P:** Dir. TV Centre: R. Chander. Engineer-in-Charge: M.R. Rao.
Station: New Delhi chE4 10kW H.
D.Prgr: Social Education Prgr: Tues 13.30–14.10, Fri 13.30–14.40. May–March: For Schools: Lessons in Chemistry and Physics for



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Higher Secondary Classes and lessons in English for 6th and 7tq classes and lesson in Social studies for 8th class.
Projected st's: Bombay – **Pub:** School TV Pamphlet (English) annual – **F.Pl:** The Sce. at Delhi is confined to 1) School TV lessons and 2) Social Education Prgr. for community viewing at Tele-clubs.

INDONESIA

TV REPUBLIK INDONESIA (Go.)

Ad: 12 min's a day – **Addr:** Jajasan Televisi RI, Senajan, Djakarta. **Cable:** Televira. **Te:** 71160 – **L.P:** See radio – **Station:** Djakarta ch9 10/2kW V – **D.Prgr:** 12.30–14.30(Sat 16.00).

IRAN

TELEVISION OF IRAN (Comm.)

Addr: Box 1015, Av. Pahlavi, Tehran. **Cable:** Televiran. **Te:** 621101 – **L.P:** Pres: H. Sabet. Dir. Tec: Eng. H. Victory. St. Mgr's: P. Partovi (Tehran), F. Shahbakhti (Abadan).
Stations: Teheran chA3 4/0.8kW H – Abadan chA3 12/2.4kW – Ahwaz chA12 0.5kW (rel. Abadan).
D.Prgr's: Tehran 13.30–21.30, Abadan: 14.30–20.30.

IRAQ

BAGHDAD TELEVISION (Go.)

Addr: Ministry of Guidance, Broadc. House, Salhiya, Baghdad – **L.P:** See radio – **Station:** Salhiya chE8 38/7.6kW H – **D.Prgr:** 07.00–08.00, 15.00–21.00 – **F.Pl:** Relay st's at Baqubah, Basra, Kirkuk, Mosul, Samawah, Shinaghah.

ISRAEL

Educational Television to be established during 1965 by the Israel Broadc. Service.

JAPAN

NIPPON HOSO KYOKAI

(Public Corporation, non Go, non-comm.)
Monochrome-TV:
Stations: NHK operates two nationwide TV networks General and Educ. As of Oct. 11 1964 there is a total of 460 st's: 234 General TV netw. and 226 for the Educational TV netw.
Call: JO-TV. **Po:** H exc. Kainan st. V – **Ch:** J – **Def:** 525 – **Color-TV:** 160 st's for General netw. and 67 for Educ. netw. operate Color broadcasts. System: NTSC. [1]=General Sce. [2]=Educ. Sce.

Call	ch	kW/W
[°] Sapporo		
[1]) IK	3	10
[2]) IB	12	10
Otaru		
[1]) –	11	75W
[2]) –	2	75W
Ashibetsu		
[1]) –	4	65W
[2]) –	2	65W
Hakodate		
[1]) VK	4	1
[2]) VB	10	1
Esashi		
[1]) –	9	0.1
[2]) –	2	0.1
Kitahiyama		
[1]) –	4	0.1
[2]) –	12	0.1
Asahikawa		
[1]) CG	9	1
[2]) CC	2	1
Wakkanai		
[1]) –	9	0.25
[2]) –	2	0.25
Wakkanai-Fuijimigaoka		
[1]) –	4	0.1
[2]) –	12	0.1
Nayoro		
[1]) –	4	0.25
[2]) –	12	0.25
Ashiyoro		
[1]) –	9	10W
[2]) –	2	10W
Rumoi		
[1]) –	4	0.1
[2]) –	2	0.1
Esashi		
[1]) –	4	10W
[2]) –	12	10W
Obihiro		
[1]) OG	4	1
[2]) OC	12	1
Ashiyoro		
[1]) –	9	10W
[2]) –	2	10W

Call	ch	kW/W
Kushiro		
[1]) PG	9	1
[2]) PC	2	1
Nemuro		
[1]) –	9	0.1
[2]) –	2	0.1
Nakashibetsu		
[1]) –	4	0.25
[2]) –	12	0.25
Rausu		
[1]) –	9	10W
[2]) –	2	10W
Kitami		
[1]) KP	3	1
[2]) KD	12	1
Monbetsu		
[1]) –	9	0.1
[2]) –	2	0.1
Takinoue		
[1]) KP	4	30W
[2]) KD	12	30W
Muroran		
[1]) IU	9	1
[2]) IT	2	1
Urakawa		
[1]) –	9	0.1
[2]) –	2	0.1
Kuttian		
[1]) –	4	10W
[2]) –	12	10W
[°]) Sendai		
[1]) HK	3	10
[2]) HB	5	10
Kesennuma		
[1]) –	2	0.1
[2]) –	10	0.1
Naruko		
[1]) –	4	2W
[2]) –	2	2W
Shiraishi		
[1]) –	6	10W
[2]) –	4	10W
Akita		
[1]) UK	9	5
[2]) UB	2	5

Call	ch	kW/W
Odate		
[1]) –	4	0.1
[2]) –	8	0.1
Hanawa		
[1]) –	2	0.1
[2]) –	12	0.1
Yuzawa		
[1]) –	3	90W
[2]) –	5	90W
Tazawako		
[1]) –	10	100
[2]) –	8	100
Yamagata		
[1]) JG	8	3
[2]) JC	4	3
Shinjo		
[1]) –	9	30W
[2]) –	2	30W
Oguni		
[1]) –	9	30W
[2]) –	2	30W
Nagai		
[1]) –	3	0.1
[2]) –	6	0.1
Tsuruoka		
[1]) JP	3	1
[2]) JD	6	1
Morioka		
[1]) QG	4	3
[2]) QC	8	3
Kamaishi		
[1]) –	2	0.25
[2]) –	12	0.25
Miyako		
[1]) –	4	75W
[2]) –	8	75W
Ofunato		
[2]) –	9	10W
[2]) –	5	10W
Yamada		
[1]) –	3	3W
[2]) –	5	3W
Kuji		
[1]) –	3	3W
[2]) –	10	3W

Call	ch	kW/W
Kitafukuoka		
[1]) –	5	0.25
[2]) –	12	0.25
Fukushima		
[1]) FP	9	3
[2]) FD	2	3
Soma/ Haramachi		
[1]) EP	8	0.1
[2]) FD	4	0.1
Tomioka		
[1]) –	9	10W
[2]) –	2	10W
Kisu/ Fukushima		
[1]) –	4	3W
[2]) –	8	3W
Matsumoto		
[1]) –	1	3W
[2]) –	3	3W
Ida		
[1]) –	4	0.25
[2]) –	3	0.25
Okaya/Suwa		
[1]) –	4	75W
[2]) –	8	75W
Okaya/ Kawagishi		
[1]) –	10	50mW
[2]) –	3	50mW
Akeshina		
[1]) –	4	3W
[2]) –	10	3W
Omachi		
[1]) –	5	3W
[2]) –	3	3W
Agematsu		
[1]) –	2	1W
[2]) –	12	1W
Tatsuno		
[1]) NK	1	3W
[2]) NB	8	3W
Takato		
[1]) NK	10	3W
[2]) NB	8	3W

Call	ch	kW/W
Nigata		
[1]) QK	8	5
[2]) QB	12	5
Takada		
[1]) –	3	75W
[2]) –	1	75W
Aikawa		
[1]) –	4	3W
[2]) –	9	3W
Koide		
[1]) –	3	0.1
[2]) –	11	0.1
Tsugawa		
[1]) –	4	3W
[2]) –	11	3W
Tsunan		
[1]) –	4	30W
[2]) –	10	30W
Itoigawa		
[1]) –	4	30W
[2]) –	9	30W
Echigo/ Yuzawa		
[1]) –	4	3W
[2]) –	10	3W
Kofu		
[1]) KG	1	3
[2]) KC	3	3
Rizuken/ Takada		
[1]) QG	3	8W
[2]) QC	7	8W
Wakamatsu		
[1]) HT	3	1
[2]) HY	1	1
Taira		
[1]) –	4	40W
[2]) –	10	40W
Aomori		
[1]) TG	3	5
[2]) TC	5	5
Mutsu		
[1]) –	4	0.1
[2]) –	12	0.1
Hachinohe		
[1]) –	9	0.5
[2]) –	7	0.5
Tajima		
[1]) HT	9	30W
[2]) HY	5	30W
*) Tokyo		
[1]) AK	1	50
[2]) AB	3	50
Hitachi (UHF)		
[1]) –	52	0.1
[2]) –	50	0.1
Takahagi (UHF)		
[1]) –	51	0.1
[2]) –	49	0.1
Odawara		
[1]) –	52	0.1
[2]) –	50	0.1
Nijima		
[1]) –	52	0.3
[2]) –	50	0.3
Nagano		
[1]) NK	2	1
[2]) NB	9	1
[1]) –	5	75W
[2]) –	3	75W
Yachiho		
[1]) –	4	3W
[2]) –	10	3W
Saku		
[1]) –	5	10W
[2]) –	3	10W
Iiyama		
[1]) –	4	3W
[2]) –	10	3W
Tokura/ Kamiyamada		
[1]) –	4	3W
[2]) –	10	3W

Call	ch	kW/W
Shinsu/ Shinmachi		
[1]) –	4	10W
[2]) –	10	10W
Yamanouchi		
[1]) –	10	3W
[2]) –	1	3W
Sanada		
[1]) –	5	10W
[2]) –	3	10W
Fujiyoshida		
[1]) –	9	0.25
[2]) –	2	0.25
Nagoya		
[1]) CK	3	10
[2]) CB	9	10
Takayama		
[1]) –	4	30W
[2]) –	2	30W
Gujo/ Hachiman		
[1]) –	4	100W
[2]) –	12	100W
Gero		
[1]) –	4	10W
[2]) –	12	10W
Ise		
[1]) –	52	100W
[2]) –	49	100W
Owase		
[1]) –	4	30W
[2]) –	12	30W
Nakatsugawa		
[1]) –	4	100W
[2]) –	12	100W
Toyohashi		
[1]) –	53	0.1
[2]) –	50	0.1
Suzu		
[1]) –	4	25W
[2]) –	8	25W
Atami		
[1]) PK	47	0.1
[2]) PB	49	0.1
Mishima		
[1]) PK	53	0.1
[2]) PB	51	0.1
Kanazawa		
[1]) JK	4	3
[2]) JB	8	3
Nanao		
[1]) –	9	100W
[2]) –	5	100W
Wajima		
[1]) –	3	30W
[2]) –	12	30W
Tamasu		
[1]) –	4	25W
[2]) –	8	25W
Monzen		
[1]) –	9	1W
[2]) –	5	1W
Wajima/ Mitsui		
[1]) –	4	100mW
[2]) –	8	100mW
Shizuoka		
[1]) PK	9	1
[2]) PB	2	1
Yoshiwara		
[1]) –	4	14W
[2]) –	8	14W
Shimada		
[1]) –	1	0.1
[2]) –	3	0.1
Shimoda		
[1]) PK	59	10W
[2]) PB	57	10W
Higashi/Izu		
[1]) –	53	10W
[2]) –	51	10W
Higashi/ Sakuma		
[1]) –	3	3W
[2]) –	9	3W

Call	ch	kW/W
Sakuma		
[1]) –	10	3W
[2]) –	2	3W
Gotenba		
[1]) PK	47	30W
[2]) PB	49	30W
Hamamatsu		
[1]) DG	4	1
[2]) DC	8	1
Fukui		
[1]) FG	9	3
[2]) FC	3	3
Obama		
[1]) –	2	30W
[2]) –	10	30W
Tsuruga		
[1]) –	6	30W
[2]) –	12	30W
Ono		
[1]) –	5	35W
[2]) –	1	35W
Takahama		
[1]) FG	6	1W
[2]) FC	12	1W
Saijo		
[1]) DP	2	3W
[2]) DD	6	3W
Toyama		
[1]) IG	3	3
[2]) IC	10	3
Unazuki		
[1]) IG	4	3W
[2]) IC	2	3W
[°]) Osaka		
[1]) BK	2	10
[2]) BB	12	10
Shingu		
[1]) BK	2	10
[2]) BB	12	10
Kainan		
[1]) –	2	1W
Tochihara		
[1]) BK	50	100W
[2]) BB	47	100W
Gobo		
[1]) –	49	100W
[2]) –	46	100W
Himeji		
[1]) –	50	100W
[2]) –	47	100W
Fukuchiyama		
[1]) –	3	30W
Maizuru		
[1]) –	1	50W
[°]) Hiroshima		
[1]) FK	3	10
[2]) FB	7	10
Miyoshi		
[1]) –	6	75W
[2]) –	1	75W
Kure		
[1]) –	11	10W
[2]) –	1	10W
Onomichi		
[1]) DP	1	1
[2]) DD	7	1
Osaki		
[1]) –	3	3W
Fukuyama		
[1]) DP	5	100W
[2]) DD	3	100W
Fuchu		
[1]) –	56	100W
[2]) –	53	100W
Okayama		
[1]) KK	5	10
[2]) KB	3	10
Tsuyama		
[1]) –	2	75W
[2]) –	12	75W
Nimi		
[1]) –	1	10W
[2]) –	4	10W

Call	ch	kW/W
Takahashi		
[1]) –	2	10W
[2]) –	12	10W
Ihara		
[1]) KK	58	3W
[2]) KB	55	3W
Kasaoka		
[1]) –	2	0.1
[2]) –	4	0.1
Matsue		
[1]) TK	6	1
[2]) TB	12	1
Hamada		
[1]) –	2	0.5
[2]) –	9	0.5
Ota		
[1]) –	3	10W
[2]) –	4	10W
Kakeya		
[1]) –	9	10W
[2]) –	4	10W
Tsuwano		
[1]) TK	4	3W
[2]) TB	3	3W
Iwami		
[1]) –	3	3W
[2]) –	4	3W
Kawamoto		
[1]) –	7	3W
[2]) –	12	3W
Nita		
[1]) –	3	10W
[2]) –	4	10W
Yokota		
[1]) –	9	10W
[2]) –	5	10W
Hino		
[1]) LG	2	0.1
[2]) LC	5	0.1
Yanai		
[1]) UG	57	0.1
[2]) UC	54	0.1
Ozu		
[1]) ZK	9	30W
[2]) ZB	1	30W
Tottori		
[1]) LG	3	1
[2]) LC	4	1
Wakasa		
[1]) LG	9	100
[2]) LC	7	100
Kawahara		
[1]) –	2	3W
[2]) –	12	3W
Chizu		
[1]) –	6	50mW
[2]) –	12	50mW
Yamaguchi		
[1]) UG	9	1
[2]) UC	1	1
Hagi		
[1]) –	3	100W
[2]) –	6	100W
Iwakuni		
[1]) –	9	10W
[2]) –	1	10W
Mine		
[1]) UG	58	100W
[2]) UC	55	100W
Ato		
[1]) –	8	10W
[2]) –	12	10W
[°]) Matsuyama		
[1]) ZK	6	5
[2]) ZB	2	5
Uwajima		
[1]) –	6	75W
[2]) –	1	75W
Nihama		
[1]) ZQ	2	0.25
[2]) –	4	0.25
Yawatahama		
[1]) –	8	0.25
[2]) –	2	0.25

KNOWN THE WORLD OVER! Programs like Perry Mason; Have Gun, Will Travel; CBS Reports and Gunsmoke are world famous. So are performers like Jackie Gleason; Lucille Ball and E. G. Marshall. These and other CBS programs and personalities are currently being enjoyed by millions of viewers in 70 countries around the globe, at the rate of more than 2,900 half hours a week. Contact one of CBS Films' 22 strategically-located offices and sales representatives about the more than 80 properties we distribute...known the world over as the finest programs in all television! **CBS FILMS**

Call	ch	kW/W
Yawatahama-Muke		
[1]) ZQ	6	3W
[2]) ZB	12	3W
Kikuma		
[1]) –	57	100W
[2]) –	54	100W
Kochi		
[1]) RK	4	1
[2]) RB	6	1
Nakamura		
[1]) –	1	0.25
[2]) –	11	250W
Minami-Uwa		
[1]) ZQ	9	0.1
[2]) ZB	12	0.1
Sukumo		
[1]) –	4	10W
[2]) –	2	10W
Suzaki		
[1]) –	2	20W
[2]) –	12	20W
Sagawa		
[1]) –	1	3W
[2]) –	11	3W
Aki		
[1]) RK	1	10W
[2]) RB	11	10W
Tosamura		
[1]) –	2	10W
[2]) –	12	10W
Motoyama		
[1])		4 100mW
[2]) –		6 100mW
Otoyo		
[1]) –		3 100mW
[2]) –		5 100mW
Toyonaga		
[1]) –	4	3W
[2]) –	6	3W
Tokushima		
[1]) XK	3	1
Ikeda		
[1]) –	6	2W

Call	ch	kW/W
Hiwasa		
[1]) –	9	100W
[2]) –	8	50mW
Higo-Oguni		
[1]) GK	6	10W
[2]) GB	10	10W
Aso		
[1]) GK	3	10W
[2]) GB	12	10W
Kurume		
[1]) LK	46	0.3
[2]) LB	54	0.3
Omuta		
[1]) LK	52	0.1
[2]) LB	50	0.1
[c]) **Kumamoto**		
[1]) GK	9	1
[2]) GB	2	1
Minamata		
[1]) –	4	0.5
[2]) –	1	0.5
Ushibuka		
[1]) –	9	3W
[2]) –	2	3W
Hitoyoshi		
[1]) –	3	75W
[2]) –	1	75W
Takamori		
[1]) GK	8	10W
[2]) GB	1	10W
Yabe		
[1]) –	4	10W
[2]) –	8	10W
Fukuoka		
[1]) LK	3	10
[2]) LB	6	10
Kurume		
[1]) LK	46	0.3
[2]) LB	54	0.3
Omuda		
[1]) –	52	0.1
[2]) –	50	0.1

Call	ch	kW/W
Kitakyushu		
[1]) SK	6	1
[2]) SB	12	1
Nagasaki		
[1]) AG	3	1
[2]) AC	1	1
Fukue		
[1]) AG	9	30W
[2]) AC	12	30W
Isahaya		
[1]) –	47	0.1
[2]) –	45	0.1
Sasebo		
[1]) AT	8	1
[2]) AY	2	1
Hirato		
[1]) –	3	10W
[2]) –	1	10W
Izuhara		
[1]) –	5	0.3
[2]) –	11	0.3
Gonoura		
[1]) AT	59	0.3
[2]) AY	56	0.3
Matsuura		
[1]) AT	9	30W
[2]) AY	6	30W
Kagoshima		
[1]) HG	3	5
[2]) HC	5	5
Naze		
[1]) HG	3	0.25
[2]) HC	4	0.25
Kanoya		
[1]) –	4	75W
[2]) –	2	75W
Makurazaki		
[1]) –	4	100W
[2]) –	9	100W
Akune		
[1]) –	8	0.1
[2]) –	12	0.1

Call	ch	kW/W
Tanegashima		
[1]) –	8	0.1
[2]) –	12	0.1
Okuchi		
[1]) HG	9	10W
[2]) HC	2	10W
Miyazaki		
[1]) MG	8	1
[2])MC	12	1
Nobeoka		
[1]) –	4	0.25
[2]) –	2	0.25
Takachiho		
[1]) MG	3	30W
[2])MC	12	30W
Iino		
[1]) –	4	10W
[2]) –	3	10W
Ebino		
[1]) –	9	100mW
[2]) –	4	100mW
Oita		
[1]) IP	3	3
[2]) ID	12	3
Saeki		
[1]) –	7	30W
[2]) –	1	30W
Hita		
[1]) –	5	16W
[2]) –	2	16W
Tsukumi		
[1]) –	6	3W
[2]) –	2	3W
Takeda		
[1]) –	8	3W
[2]) –	1	3W
Kusu		
[1]) –	52	0.1
[2]) –	50	0.1
Karatsu		
[1]) –	50	10W
[2]) –	47	10W
Imari		
[1]) –	51	0.3
[2]) –	53	0.3

D.Prgr: Gen: 21.00–14.55(Sun 14.57) – Educ: W 22.00–23.00, 00.00–07.00(Sat 05.00), 09.00–14.50. Sun 22.00–05.00, 09.00–14.50. **L.L: German:** W 22.30–23.00, 09.30–10.00. **English Conversation:** W 09.00–09.30, 13.30–14.00. (Classified by broadc. h's %): Gen-TV: N. 28.5, Educ. 10.4, Cultural 35.5, Entertainm. 25.6. Educ-TV: Educ. 81.2, Culture 16.6, N: 2.2.

F.Pl: The second 6-year plan (started in 1962) aims to increase the number of st's in both netw's to 461 and Educ. TV to the same daily average of 18 h's with that of the General TV.

PRIVATE STATIONS: Call JO-TV chJ. *=Color TV. 525 lines.

D.Prgr: General (approx.) W: 23.00–24.00 or from 02.00–05.00, 08.00–15.00. Sun approx. 23.00 (or 00.00)–15.00.

Call	ch	kW(ERP)	Name
HR	1	10	Hokkaido Broadc. Corpo, Sapporo: 21.50–16.00.
FX	1	10	Tokai Television Broadc. Co, Nagoya
IR	1	10	Tohoku Broadc. Co, Sendai
LR	1	3	Kita-Nihon Broadc. Co, Toyama
IF	1	10	Kyushu Asahi Broadc. Co, Fukuoka
CF	1	5	R. Minami-Nihon Broadc. Co, Kagoshima
GR	1	5	R. Aomori Broadc. Co, Aomori
JX	1	1	Nihon-Kai Telecasting Co, Tottori
FR	4	10	RKB Mainichi Broadc. Co, Fukuoka
OR	4	10/2.5	MBS Mainichi Broadc. System, Osaka: 21.30–16.00
[1]) AX	4*	50/12.5	Nippon TV-Network Co, Niban-cho, Tokyo: 21.40–15.00(Sat 16.30)
ER	4	10	R. Chugoku Co, Hiroshima: 22.40–07.00
AR	5	10	Chubu-Nippon Broadc. Co, Nagoya
DR	5	5	Broadc. System of Niigata, Niigata
KX	5	10	Sapporo TV Broadc. Co, Sapporo
JF	5	3	Yamanashi Broadc. System Inc, Yamanashi
GF	5	3	R. Oita Broadc. Co, Oita
UR	5	1	Nagasaki Broadc. Co, Nagasaki
DF	6	3	Iwate Broadc. Co, Morioka
[2]) KR	6*	50/12.5	Tokyo Broadc. System: 21.15–15.00
[3]) NR	6*	10	Asahi Broadc. Corp: 21.30–16.00
MR	6	3	Hokuriku Broadc. Co, Kanazawa
HO	6	1/0.25	Hakodate
HW	6	1/0.25	Obihiro
[4]) DX	8	100/25	Kansai Telecasting Co, Osaka: 21.30–16.30
[5]) CX	8	50	Fuji Telecasting Co: 21.20–15.30
ZR	8	1	R. Kochi Broadc. Co, Kochi
KF	9	10	Nishi-Nippon Broadc. Co, Takamatsu
AF	10	5	Nankai Broadc. Co, Matsuyama
EF	10	3	Yamagata Broadc. Co, Yamagata
IX	10*	10	Yomiuri TV Broadc. Corp, Osaka
[6]) EX	10	50/12.5	Nippon TV Network Co: 21.50–07.00, 07.30–15.35
YTV	10	10/25	Osaka
YR	11	10	Sanyo Broadc. Co, Okayama
TR	11	5	Akita Broadc. System, Akita
PR	11	3	Fukui Broadc. Co, Fukui
SR	11	1	Shinetsu Broadc. Co, Nagano
HE	11	1/0.25	Asahikawa
QL	11	1/0.25	Kushiro
QF	11	1/0.25	Muroran
NF	10	1	Miyazaki Broadc. Co, Miyazaki
PE	11	1	Yamaguchi Broadc. Co, Tokyuama
VR	11	1	Shizuoka Broadc. System, Shizuoka
JR	1	1	Shikoku Broadc. Corp, Tokushima
BF	11	1	Kumamoto Broadc. Corp. Kumamoto
PX	11	3	Fukushima Television Broadc. Co, Fukushima
LX	11	10/2.5	Nagoya Broadc. Co, Nagoya: 22.00–15.00
HX	10	1	Television Nishi-Nippon Corp, Yawata
HF	10	1	San-In Broadc. System, Yonago
KSDW	10	5	Okinawa Television, Naha
KSAR	12	5	Ryukyus Broadc. Corp, Naha Okinawa
NX	12	10	Hiroshima Television, Hiroshima
[7]) TX	12	50/12.5	Japan Science Foundation, Tokyo

[1]) Color TV 20 h weekly –
[2]) 36 Hitotsugicho, Akasaka, Minato-Ku, Tokyo. **L.P:** Chmn: T. Adachi. Pres: K. Shikakura. Color TV 1 h weekly –
[3]) Asahi Broadcasting Corpo, TV Station, Dojima, Kitaku, Osaka. **Cable:** Jonrtv. **Te:** 361-1191. **L.P:** See radio. Color TV 1 h weekly.
[4]) 51 Umegae-cho, Kitaku, Osaka. **L.P:** Pres: Y. Kobayashi. Gen. Mgr: K. Hirabayashi.
[5]) Chiyoda-ku, Tokyo. **L.P:** Dir. Gen: N Shikanai. Dir. Tec: E. Nishiyama.
[6]) 55 Azabu Zaimokucho, Minato-ku, Tokyo. **L.P:** Chmn: Y. Akao. Pres: H. Okawa. Man. Dir: F. Nishonomiya.
[7]) 2, Daikan-cho, Chiyoda-ku, Tokyo. **L.P:** Chmn: C. Kurata.

KOREA (Rep.)

SEOUL TELEVISION STATION (Go.)

Addr: Namsandong 3 ka 34, Chungku, Seoul. **Te:** 8-4127.
L.P: St. Mgr: J. Y. Kim.
Station: Seoul ch9 2kW V – **D.Prgr:** 08.00(Sun 02.30)–14.30.

AMERICAN FORCES KOREA NETWORK (US Go-Funds)

Addr: APO 301, S. Francisco, Cal, USA. **Te:** Yongsan 2495 – **L.P:** Dir. Gen: Lt. Col: J. E. Melanson, Commander. Dep. Dir. Gen: Lt. W. A. Burke. Dir. Prgr: L. Morrow. Dir. Tec: T. J. Daugherty.
Stations: Pol=H. * separate film chain.
Seoul chA2 40kW – Hwaakson chA12 2kW – Kunsan chA2 0.4kW – Taegu chA3 2.5kW – Taejon chA12 0.3kW – *Pusan chA2 0.1kW.
D.Prgr: 08.00(Sat 01.30, Sun 00.00)–16.00.

KUWAIT

TELEVISION OF KUWAIT (Go.)

Addr: Ministry of Guidance and Inf. P.O. Box 621, Kuwait.
Cable: Alirshad. **Te:** 39411 – **L.P:** See radio.
Stations: Dasman chE8 (Retma) 0.1kW H – Mutlaa chE8 (14.2kW to Kuwait Town 31.6kW to No, 29.8kW to So) – **D.Prgr:** 16.00–20.00.
Test-tr's: 12.00–14.00, 15.30–16.00. **Projected St's:** Mutlaa chE10, Roudatein chA8 (Retma) – So. Repeater chA6.

The Marconi Company Ltd, G.B: delivered 3 OBV.

LEBANON

COMPAGNIE LIBANAISE DE TELEVISION (Comm.)

Fi: By adv – **Addr:** B.P. 4848, Beirut – **L.P:** Pres. & Dir. Gen: Gen. S. Nofal. Vice Dir. Gen: B. M. Givadinovitch. Dir. Tec: N. Loutfi. Prgr's: W. Ezzedine.
Stations: Beirut 5kW H: chE7 (Arabic), chE9 (French/English) – Fih (No. Lebanon) 1.2kW V: chE2 (relay chE7) – Maasser el Chouf 60kW H: chE4 (relay chE7 & E9).

WANTED
Sales Representatives to sell advertising in countries where we are not now represented.
For details, write:
World Radio TV Handbook Co. Ltd.
Sundvej 6, Hellerup, Denmark.

D.Prgr: chE7: 16.30 21.00 (Sat/Sun 14.30 21.00), chE9: 17.30–21.00.
Pub: TV Magazine (weekly).

TELE ORIENT (Comm.)
Fi: By adv – **Addr:** Box 5054, Beirut. **Te:** 280001. **Cable:** Telibor – **L.P:** Dir. Gen: L. Dahdah. Dir. Tec: A. Madani. Dir. Foreign Rel: R. Boulos.
Station: chE11 100/20kW H.
D.Prgr: 16.00–22.00 in Arabic, English, French.

MALAYA

MALAYSIAN TELEVISION SERVICE
Addr: Dep. of Television, c/o Dewan Tunku Abdul Rahman, Ampang Rd, Kuala Lumpur. **Cable:** Tivimalaya. **Te:** 23181 – **L.P:** Dir: Ow Kheng Law. Head of Prgr: R. I. bin Raja Zahid. Eng. in charge: K. K. Loh – **Stations** (625 lines): Kuala Lumpur ch M10 (209–216Mc) 10/4kW H – Kuala Lumpur ch M5 (174–181Mc), ch M8 (195–202Mc) 100/10kW – **D.Prgr:** 11.30–15.30.

Pye TVT, GB: Tr, ant, studio equip.

PAKISTAN

Two st's are being set up at Lahore & Dacca and may operate early 1965.

PHILIPPINES

ASSOCIATED BROADC. CORPORATION-ABC (Comm.)
Addr: Malugay St, Makati, Rizal, Manila – **Station:** DZTM-TV chA5 **D.Prgr:** Mon, Wed, Fri 09.25–13.30; Tues, Thurs 09.25–15.00; Sat 09.00–14.30; Sun 03.55–14.30.

BOLINAO ELECTRONICS CORP. (Comm.) – **Addr:** ABS Bldg. Devey Blvd. Manila. **Te:** 8-46-84. **Cable:** Bolinao – **Stations:** DYCB-TV ch A3 2/1kW – DZAQ-TV ch A3 2/1kW – Davao City ch A7 0.5kW – **D.Prgr:** DYCB-TV: 08.00–14.00, DZAQ-TV: 07.00–16.00.

CHRONICLE BROADC. NETWORK (Comm.) – **Addr:** P.O. Box 1593, Manila. **Cable:** CBN. **Te:** 300-61 – **Station:** DZXL-TV ch A9 0.2/0.18kW – DXYL-TV ch A4 2kW – **D.Prgr:** 02.00–14.00.

INTER-ISLAND BROADC. CORP. (Comm.) – **Addr:** 61 Muralla, Intramuros, Manila – **Stations:** DZTV ch A13 25/5kW. DXTV (Davao City) ch A13 0.5kW – **D.Prgr:** 07.00–15.00.

METROPOLITAN BROADC. CO. (Comm.) – **Addr:** 964 Taft Ave, Manila – **Station:** DZRH-TV ch A11 24/49kW H – **D.Prgr:** 08.00–15.00 – **F.Pl:** Davao ch A11 3.5/7kW.

PHILIPPINE BROADC. SERVICE (Go. with comm. prgr's) – **Addr & L.P:** See radio – **Station:** DZRP-TV ch A10 H 1.5/1.2kW – DZBS-TV ch A12 0.5kW – **D.Prgr:** 09.00–14.00.

REPUBLIC BROADC. SYSTEM (Comm.) – **Addr:** E de los Santos Ave, Diliman, Quezon City. **Te:** 700221. **Cable:** "Bobstew" – **Station:** DZBB-TV ch A7 5/2.5kW – DYBB-TV ch A7 0.1kW (Ceby City). **D.Prgr:** Mon–Fri 07.30–15.00, Sat 00.00–14.00, Sun 00.00–15.30.

FEATI UNIVERSITY (Non, comm.) – **Addr:** Helios Street, Sta. Cruz, Manila – **Station:** DZFU-TV ch A14 0.4kW.

Projected st't: Chronicle Broadc. Network: Bacolod City ch A2 0.5kW, Baguio City ch A2 0.5kW, Cebu City ch A3 2kW, Cagayan de Oro ch A3 2kW – **Manila Times Publications, Inc:** Davao City ch A3 10kW, Cebu City ch A13 10kW – **Visayan Broadc. Network:** Cebu City ch A7 0.5kW, Bacolod City ch A9 0.5kW.

Ampex Videotape, USA: Chronicle Broadc. Netw, Republic Broadc. System – Pye T.V.T, GB: Studio equip (Rep. Broadc. System).
Nippon Electric Co. Japan: TV tr's and studio equip. to Philippine Broadc. Service, Metropolitan Broadc. Co.

RYUKYU ISLANDS

RYUKYUS BROADCASTING CORPORATION (Comm.)
Addr: CPO Box 4, Naha, Okinawa – **L.P:** See radio.
Station: KSAR-TV chA12 5/1kW – **D.Prgr's:** 03.00–15.00 in Japanese & English.
Nippon Electric Co, Japan, delivered 5kW tr, studio equip.

OKINAWA TELEVISION BROADC. LTD. (Comm.) – **Addr:** 1-chrome, Matsuyama-cho, Naha, Okinawa – **L.P:** Pres: T. Guschi-chan – **Station:** KSDW-TV chA10 5/2kW – **D.Prgr:** 03.00–15.00 in Japanese, English.
Nippon Electric Co, Japan: 5 kw tr, studio equip.

SAUDI ARABIA

ARAMCO-TV (Non-comm, private Co.)
Fi: Arabian American Oil Co – **Addr:** Box 1359, Dharan. **Te:** 3061. **Cable:** Aramco – **L.P:** Producer: S. Al Mozaini. Asst. Producer: S. Kubeisy – **Stations:** chA2 6/3.15kW – chA13 6/3.15kW.
D.Prgr: Sign on approx. 15.40; Prgr. time: Sat/Sun/Mon/Tues: 4 hrs, Wed, Fri: 5 hrs, Thurs: 6½ hrs (times vary with Sun) – **Pub:** weekly schedule.

SINGAPORE (Federation of Malaysia)

TELEVISION MALAYSIA SINGAPURA (Go.)
Fi: By Go. appropriation – **Fee:** Malayan $ 36 – **Addr. & L.P:** See radio.
Stations: Bukit Batok: ch E5 (Singapore I), ch E8 (Singapore II) 16kW H – **D.Prgr:** ch E5: 11.00(Sat/Sun 05.30)–16.30, ch E8: 12.15–14.45. Test Pattern: ch E5 W 02.30–04.30, ch E8 Mon–Fri: 06.30–09.30 – **F.Pl:** Two additional st's in band IV (1964/65).

The Marconi Company Ltd, GB, tr's: 2 × 5kW vision, 2 × 1kW sound – AWA, Australia, 2 × 2kW vision, 2 × 0.4kW sound – Nippon Electric Co. Ltd, Japan: TV-OBV equip.

SYRIA

SYRIAN TELEVISION SERVICE (Go.) – **Addr & L.P:** See radio.
Stations: Damascus chE5 150/10kW, Homs chE7 30/2kW – Sheikh Dahor chE9 4.5/0.075kW, Aleppo chE5 30/2kW, Saraukhiyah chE8 2.25/0.075kW – **D.Prgr:** 16.00–22.00.

THAILAND

THAI TELEVISION CO. LTD. (Semi Go, Comm.)
Fi: By adv. and Go – **Addr:** Mansion B, Rajdamnern Ave, Bangkok. **Cable:** Thaitevi. **Te:** 22273.
L.P: Dir. Gen: Lt. Gen: K. Punagunta. Gen. Mgr. & Film Buyer: R. Hongsanand. Dir. Tec: A. Pojanapisute. Dir. Prgr: Ch. Rangsikul.
Stations (System RCA): Bangkok chA4 29/14.5kW H – **Relay st's:** Khonkaen chA5 33/16.5kW H, Lampang chA8 21.4/10.7kW H, Hadyai chA9 10.7/5.35kW H – **D.Prgr:** 10.00–17.00, Sun also 04.00–09.00.

THE ARMY TELEVISION STATION (Comm.)
Operated by the Thai Army Signal Corps – **Fi:** By state and adv – **Addr:** Sanam Pao. Bangkok. **Te:** 70428 – **L.P:** Chmn. Gen: C. Navisathri. St. Mgr: Col. C. Sudhiraksa. Chief, Eng. Dept: Col. K. Kengradomying – **Station:** HSA-TV chA7 60/6kW H – **D.Prgr:** 04.45(Sat/Sun 02.00)–06.00, 10.15–17.00.

TURKEY

ISTANBUL TEKNIK UNIVERSITESI (Go. exp.)
FI: By the Technical University – **Addr:** Elektrik Fakültesi, Yüsek Frekans Teknigi Kürsüsü, Istanbul. **Te:** 482250 – **L.P:** Prof. Dr. A. Ataman – **Station:** Ch E4 50W H – **D.Prgr:** Thurs 15.00–17.00 only during the Academic Year.

PACIFIC

AUSTRALIA (Commonwealth of)

Standards: Def. 625 – Picture freq: 25 – Ch width: 7Mc FM.

AUSTRALIAN BROADCASTING COMMISSION (ABC)
National Television is controlled by the Australian Broadcasting Commission, which is responsible to the Postmaster-General, whose department controls the transmitters – **Addr.** and **L.P:** see radio.
Stations: One each in Sydney (ABN), Melbourne (ABV), Brisbane (ABQ), Adelaide (ABS), Perth (ABW) and Hobart (ABT), Canberra (ABC). Operate on Australian ch2 on 63–70Mc 100/20kW exc. ABC Canberra ch3. **Po:** H exc. Canberra V.
ABHN Newcastle ch5, H – ABEV Bendigo ch1, V – ABRV Ballarat ch3, H – ABNT Launceston ch3, H – ABDQ Toowoomba ch3, H – ABWN Wollongong ch5, H – ABCN Orange ch1, V – ABLV Latrobe Valley ch4, H – ABGV Goulburn Valley ch3, V – ABRQ Rockhampton ch3, H – ABRN Richmond Tweed ch6, H – ABTQ Townsville ch3, H.
D.Prgr's: Mon–Fri 01.30–01.50, 04.00–04.50, 06.45–13.00; Sat 03.30–13.00; Sun 01.00–02.15 (fortnightly church service), 03.00–12.50 – **Projected st's:** ABAV ch1, H (December 1964) – ABMN ch0, H (March 1965).

PRIVATE STATIONS (Comm.)
Adv. accepted under conditions of Australian Broadc. Control Board. The first two letters are an abbreviation of the name of the licence, the third indicates the state and the numeral signifies the channel. All st's 100/20kW.

1) ATVO	9) ADS7	16) TNQ7	23) TNT9
2) NBN3	10) TVW7	17) CBN8	24) NWS9
3) RVN2	11) HSV7	18) RTN8	25) NEN9
4) WIN4	12) ATN7	19) BCV8	26) GLV10
5) AMV4	13) BTQ7	20) TCN9	27) DDQ10
6) TVT6	14) CTC7	21) GTV9	28) NRN10
7) BTV6	15) RTQ7	22) QTQ9	29) TEN10
8) GMV6			

1) **Australama TV Pty Ltd,** 489 Swanston Str, Melbourne. **Te:** 340291. **L.P:** Gen. Mgr: L. A. Mauger. **D.Prgr:** 06.00–13.15 (Sat 06.30–13.00, Sun 04.30–13.15).

2) **Newcastle Broadc. & TV Corpo. Ltd**, P.O. Box 750, Mosbri Crescent, Newcastle. **L.P:** Gen. Mgr: K. Stone. **D.Prgr:** Mon–Fri: 03.30–12.30, Sat 06.15–13.00, Sun 06.00–12.00.
3) **Riverina TV Ltd**, P.O. Box 69, Wagga Wagga. **Te:** 2088. **Cable:** Rivtel. **L.P:** Mgr: W. P. Marsden. **D.Prgr:** 07.00–12.30.
4) **TV Wollongong Transmissions Ltd**, P.O. Box 500, Wollongong. **Te:** 2-6444. **Cable:** "Winteevee". **L.P:** St. Mgr: W. Lean. **D.Prgr:** 05.30(Sat 07.00, Sun 05.00)–12.30.
5) **Albury Upper Murray TV Ltd**, TV-Centre, Albury, NSW. **Te:** 5-1494. **Cable:** "Ayemfour". **L.P:** Man. Dir: A. R. Kidd. **D.Prgr:** 07.00–12.45 (Wed 02.45–12.45).
6) **Tasmanian TV Ltd**, 52 New Town Rd, Hobart, Tasmania. **L.P:** Man. Dir: E. G. McRae. **D.Prgr:** Variable hours.
7) **Ballarat & Western Victoria TV Ltd**, P.O. Box 464, Ballarat – **L.P:** Gen. Mgr: B. F. Jackson. **D.Prgr:** Sun 02.00–13.00, Mon, Thurs 07.00–13.45, Tues, Wed 02.00–13.45, Fri, Sat 07.00–13.30.
8) **Goulbourn Murray TV Ltd**, P.O. Box 666, Shepparton. **Te:** 9307 – **L.P:** Dir. Gen: R. A. Williams. **D.Prgr:** 07.00(Wed 03.00)–12.45.
9) **TV Broadcasters Ltd**, 125 Strangways Terrace, No. Adelaide, So. Australia. **Te:** 6-8591. **Cable:** "Adseven". **L.P:** Gen. Mgr: K. A. MacDonald. **D.Prgr:** variable times.
10) **TVW Ltd**, P.O. Box 9, Tuart Hill, We. Australia. **Te:** 29-14-22. **Cable:** Teleview. **L.P:** Gen. Mgr: J. W. Cruthers. **D.Prgr:** 03.45 (Sat 04.30)–13.30(Sat 14.00).
11) **Herald Sun TV Pty Ltd**, Dorcas & Wells Str, So. Melbourne. **Te:** 690771. **Cable:** Hertel. **L.P:** Mgr: K. S. Cairns. **D.Prgr:** Mon–Fri 01.30–13.45, Sat 03.45–13.45, Sun 01.45–13.00.
12) **Amalgamated TV Services Pty Ltd**, Television Centre, Epping, NSW. **Te:** WL 0111. **Cable:** Telecentre, Sydney. **L.P:** Gen. Mgr: J. H. Oswin. **D.Prgr:** Mon–Fri 03.30–13.00, Sat 23.00–13.30, Sun 02.00–13.05.
13) **Brisbane TV Ltd**, Sir Samuel Griffith Drive, Mt. Cootha, Brisbane. **Te:** 360111. **L.P:** Gen. Mgr: E. F. Allen. **D.Prgr:** 02.00–13.00.
14) **Canberra TV Ltd**, P.O. Box 633, Canberra. **Te:** 40255. **L.P:** Gen. Mgr: G. K. Barlin. **D.Prgr:** 07.00–12.30.
15) **Rockhampton TV Ltd**, P.O. Box 568, Rockhampton. **Te:** 8877. **Cable:** Arteeque. **L.P:** Mgr: M. Keogh. **D.Prgr:** 07.00–12.00.
16) **Telecasters No. Queensland Ltd**, P.O. Box 716, Townsville. **Te:** 6161. **Cable:** Teenq. **L.P:** Man. Dir: J. F. Gleeson. **D.Prgr:** 07.30 (Sat/Sun 08.00)–12.00.
17) **Country TV Services Ltd**, Box 465, Orange. **Te:** 5474. **L.P:** Mgr: J. E. Ridley. **D.Prgr:** 06.30(Sun, Thurs 05.00)–12.30(Sat 13.00).
18) **Richmond Tweed TV Ltd**, P.O. Box 423, Lismore. **Te:** 2351. **L.P:** Man. Dir: L. T. Warrick. **D.Prgr:** 07.00(Mon, Wed 02.00)–12.10.
19) **Bendigo & Ce. Victoria Telecasters Ltd**, P.O. Box 240, Bendigo. **Te:** 30584. **Cable:** Beneight. **L.P:** Gen. Mgr: F. A. McManus. **D.Prgr:** 07.00(Wed 01.55)–13.00(Sat 13.30), Sun 02.00–13.00.
20) **TV Corporation Ltd**, Artamon Rd, Willoughby. **Te:** JF-0444. **Cable:** Diffusion Sydney. **L.P:** Mgr: A. J. Baz. **D.Prgr:** 03.30–13.30 (Sat 23.00–14.00, Sun 02.00–13.20).
21) **General TV Corporation Pty Ltd**, 22–46 Bendigo Str, Richmond E.1, Vic. **Te:** 42-0201. **Cable:** Geeteevee Melbourne. **L.P:** Mgr: N. Dick. **D.Prgr:** Mon–Fri 01.30–14.00, Sat 21.30–14.00, Sun 02.00–13.00.
22) **Queensland TV Ltd**, Sir Samuel Griffith Drive, Mt. Coot-tha. **Te:** 23121. **L.P:** Gen. Mgr: J. W. McKay. **D.Prgr:** 00.50–13.00 (Sat 06.45–13.30, Sun 02.00–13.00).
23) **Northern TV Ltd**, P.O. Box 873, Launceston. **Te:** 42551. **L.P:** Mgr. Dir: A. E. Evans. **D.Prgr:** 07.00–13.15.
24) **Southern TV Corporation Ltd**, 202-208 Tynte Str, No. Adelaide. **Te:** 69322. **Cable:** Newsnine. **L.P:** Gen. Mgr: W. L. C. Davies. **D.Prgr:** 04.30–13.30, Sat 06.30–13.30, Sun 04.00–13.30.
25) **TV New England Ltd**, P.O. Box 19, So. Tamworth, NSW. **Te:** 58253. **L.P:** Man. Dir: E. Higginbotham. **D.Prgr:** 07.00–12.00.
26) **Gippsland Latrobe Valley Telecasters Ltd**, P.O. Box 220, Traralgon. **Te:** 71366. **L.P:** Gen. Mgr: D. Smith. **D.Prgr:** variable times.
27) **Darling Downs TV Ltd**, P.O. Box 34, Toowoomba. **Te:** 22288 – **L.P:** Gen. Mgr: S. J. Fitzpatrick. **D.Prgr:** 06.45(Sun 05.30)–12.30.
28) **Northern Rivers TV Ltd**, 71 Grafton Str, Coffs Harbour, NSW. **Te:** 63. **L.P:** Man. Dir: A. Cave. **D.Prgr:** 07.00–12.30.
29) **United Telecasters Sydney Ltd**, 47 York Str, Sydney. **Te:** 20233. **Cable:** Unitelcast. **L.P:** Gen. Mgr: K. A. E. Fox. **D.Prgr.** (from March 1965): Mon–Fri 06.00–13.00, Sat 04.00–13.30, Sun 04.00–13.00.

Projected St's: Sunraysia TV Ltd, 18 Deakin Ave, Mildura. **L.P:** Gen. Mgr: M. Folie. *St: ch 10 50/10kW H to open July 1st 65.* **Wide Bay-Burnett TV Ltd**, P.O. Box 30, Maryborough, Qld. **L.P:** Mgr: F. T. Yates.

HAWAII (US State)

All St's Comm – Po: Vertical.

HAWAIIAN BROADCASTING SYSTEM – **Addr:** P.O. Box 581, Honolulu – **L.P:** Gen. Mgr: J. Herold. Sales Mgr: J. Thompson. **Stations:** Honolulu KGMB-TV ch A3/A9/108/60kW. **Satellites:** Wailuku KMAU-TV ch A3 6/3kW, Hilo KHBC-TV ch 9 1/0.5kW, Lihue ch 70 UHF, Kalaheo K82AM ch82 UHF (Systems: CBS & KGMB) – **D.Prgr:** *16.00–10.00 in E, J, P.*

KAISER BROADCASTING – **Addr:** 1290 Ala Moana Blvd, Honolulu. **Te:** 53-991 – **L.P:** Gen. Mgr: D. Kawakami. Sales Mgr: St. Anderson. **Station:** Honolulu KHVH-TV chA4 (color) 26.3/13.2 kW. **Satellites:** Hilo KHJK-TV chA13 2/1kW, Wailuku KMVI-TV chA12 30/15kW, Honohina K76BB ch76 UHF, Lihue K74BC ch74 UHF, Kulani K70BS ch70 UHF, Naalehu K74 UHF – **D.Prgr:** 16.00–10.00 in E.

RADIO HONOLULU – **Addr:** 1170 Auahi St, Honolulu. **Cable:** Radhon 140HU. **Te:** 562-366 – **L.P:** Gen. Mgr: J. D. Keating. Sales Mgr: C. J. Thrumston. **Station:** Honolulu KONA-TV chA2 (color) 30.7/15.4kW. **Satellites:** Wailuku KALA-TV ch7 (color), Lihue K78AR ch78 UHF, Hilo KALU-TV chA11 (color) – **D.Prgr:** 22.00–10.00 in E, C, F.

HAWAIIAN PARADISE PARK CORPO – **Addr:** 2227A Kalakua Ave, Honolulu 15. **Te:** 933-823 – **L.P:** Gen. Mgr: R. A. Greer Jr – **Station:** KTRG-TV chA13 30.7/15.4kW – **D.Prgr:** W 02.20(Sat 01.30)–09.00 in E, C, F.

MARIANAS ISLANDS (U.S. Territory)

KUAM TELEVISION (Comm.)
Addr: P.O. Box 368, Agana. **Cable:** Kuam.
L.P: Pres: Phil Berg. Res. Mgr: R.A. Jordan.
Stations: chA8, A10 0.43/0.22kW V – **D.Prgr's:** 07.30–14.00(Sat 23.00–14.00).

NEW ZEALAND

NEW ZEALAND BROADCASTING CORP.
(Statutory Public Body)
Fi: By license payments and adv. revenue Tues, Wed, Thurs, Sat – **Fee:** NZ £ 6/10/0 – **Addr:** P.O. Box 98, Wellington. **Cable:** Broadserv. **Te:** 48-200 – **L.P:** see radio.
Stations: Auckland AKTV ch2 10/2kW H – Wellington WNTV ch1 10/2kW H – Christchurch CHTV ch3 10/2kW H – Dunedin DNTV ch2 10/2kW H – **Repeaters:** Wharite ch2 1/0.2kW V – Mt. Te Aroha ch 1 1/0.2kW V – Kuriwao ch5 0.2/0.04kW – Masterton ch6 0.1/0.02kW H.
D.Prgr: Mon–Thurs 05.00–11.00, Fri 05.00–12.00, Sat 02.00–12.00, Sun 02.00–11.00 – **F.PL:** Four 100kW tr's ch 1, 2, 3 (1965/66) and 100kW repeater st's at Waikato, Manawatu.

Ampex Videotape, USA: Dunedin, Lyttleton, Wellington – The Marconi Company, Ltd, GB: TV tr's: Wellington 1×5, 1×1kW, Dunedin 1×5, 1×1kW – Christchurch 2×5, 2×1kW, 1×500, 1×250W, Lyttleton 50W – Ant: Christchurch – Studio equip: Wellington, Dunedin, Christchurch, Auckland, Lyttleton – OBV: Lyttleton (3) – Pye TVT GB: Studio equip.

SAMOA (American)

TELEVISION OF SAMOA (Go.)
Addr: Dept. of Education, Pago Pago. **Te:** 2438 – **L.P:** Mgr: B. L. MacKenzie. Dir. Tec: H. Cronin – **Stations:** chA2/A4/A5 50kW V – Satellites: chA7/A11 0.01kW H (Feb 1965) – **D.Prgr:** 18.30–02.00 (for schools), 05.30–08.30 – **Projected:** chA8/A10/A13 50kW V (Jan 66), chA3/A6/A12 0.01kW H.

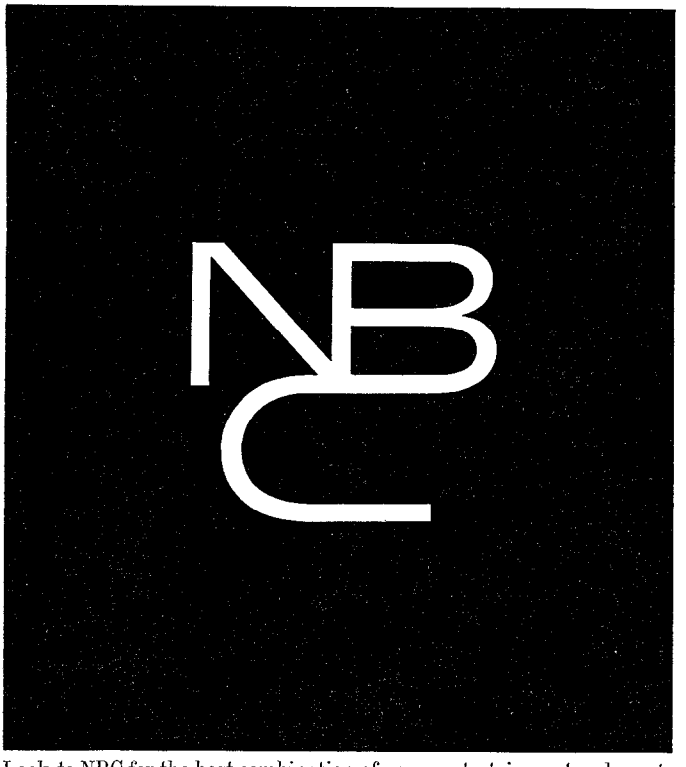
NORTH AMERICA

BERMUDA

BERMUDA RADIO & TELEVISION CO. LTD. (Comm.)
Fi: By adv – **Addr. & L.P:** See radio – **Station** (System RCA): ZBM-TV chA10 16/4kW H – **D.Prgr:** 20.00–03.15 (Thurs, Fri, Sat 04.30).

CANADA

CANADIAN BROADCASTING CORPORATION
(Publicly-owned)
Abbreviations: see radio.
Addr: Nfld. Reg: CBNT, P.O. Box 5490, St. John's, Nfld – CFSN-TV, P.O. Box 190, Stephenville, Nfld. CFLA-TV, USAF Side, Goose Bay Airport, Goose Bay, Lab. CBYT, Box 610, Corner Brook – **Quebec Reg:** CBFT, CBMT, 1425 Dorchester Str. West, Montreal. CBVT, Palais Montcalm, Quebec City – **Maritime Reg:** CBHT, P.O. Box 3000, Halifax, N.S. CBAFT, P.O. Box 950, Moncton. N.B – **Prairie Reg:** CBWT, CBWFT, P.O. Box 160, Winnipeg, Man. CBXT, P.O. Box 555, Edmonton, Alta – **B.C. Reg:** CBUT, 701 Hornby Str, Vancouver – **Ontario:** English Networks HDQ, CBLT, P.O. Box 500, Toronto – **Ottawa Area:** CBOT, CBOFT, P.O. Box 3220, Station "C", Ottawa.
L.P: Nfld. Reg: CBNT, CBYT: Dir. W. F. Galgay; Mgr. CBYT: C. V. Hierlihy – Quebec Reg: CBFT. CBMT: Dir. G. Lamarche; Prgr. Dir. F. Guérard (French), K. Davey (English); CBVT Mgr. R. Dussault – English Networks and Toronto Area: Dir. A. K. Morrow – Maritime Reg: CBHT: Dir. S. R. Kennedy; Prgr. Dir. CBHT G. W. Hames; CBAFT: Mgr. G. Thériault – Prairie Reg: Dir. J. R. Finlay: Prgr. Dir. CBWT: D. E. Cameron; CBWFT: M. Desaulniers:



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CBXT: R. Horley – B.C. Reg: Dir. K. P. Caple; CBUT Prgr. Dir: M. Munro – Ottawa Area: CBOT-CBOFT: Dir. J. Dunn; Prgr. Dir. D. Townsend.

CBC Stations: Po: V – E=English Net, F=French Net – Def. 525.

Stations	Call	chA	kW(ERP)	Sce.
Montreal	CBFT	2	100/50	F
Vancouver	CBUT	2	89.4/47.8	E
Halifax	CBHT	3	100/60	E
Winnipeg	CBWT	6	100/50	E
Ottawa	CBOT	4	50.1/26.7	E
Corner Brook	CBYT	5	0.197/0.098	E
Edmonton	CBXT	5	318/158	E
Montreal	CBMT	6	100/60	E
St. John's	CBNT	8	196/98	E
Montreal	CBVT	11	173/87	F
Toronto	CBLT	6	99.5/53.5	E
Winnipeg	CBWFT	3	59/35.2	F
Stephenville	CFSN-TV	8	0.294/0.147	E
Goose Bay	CFLA-TV	8	0.348/0.174	E
Ottawa	CBOFT	9	55/31	F
Moncton	CBAFT	11	10.06/5.03	F

H of tr: approx. 15.00–06.00.

Network Rel. st's: CBFST (Sturgeon Falls, Ont.) ch7 9.75/5.527kW – CBWAT (Kenora, Ont.) ch8 9.3/5.5kW – CBWBT (Flin Flon, Man.) ch10 6.8/3.4kW – CBXAT (Grande Prairie, Alta.) ch10 36/18kW – CBFOT (Timmins Ont.) ch9 16/8kW – CBFCT (Cheticamp, N.S.) ch10 7.9/4.0kW – CBUBT (Cranbrook, B.C.) ch10 1.1/0.505kW – CBUAT (Trail, B.C.) ch11 0.187/0.124kW.

Rebroadc. st's: CBHT1 (Liverpool, N.S), ch12 0.412/0.248kW – CBHT2 (Shelburne, N.S) ch8 0.423/0.254kW – CHBT3 (Yarmout , N.S) ch11 0.412/0.248kW – CBHT4 (Sheet Harbour, N.S) ch11 0.66/0.33kW – CBFT1 (Mont Tremblant, Que) ch11 0.6/0.3kW – CBFT2 (Mont Laurier, Que) ch3 5.54/2.80kW – CBFST1 (Sudbury Ont) ch13 0.601/0.361kW – CBFST2 (Temiscaming, Que) ch12 7.08/3.54kW – CBFOT1 (Kapuskasing, Ont) ch12 17.4/8.7kW – CBWAT1 (Dryden, Ont) ch8 8.9/4.45kW – CBWAT2 (Sioux Lookout, Ont) ch12 0.005/0.025kW – CBWAT3 (Fort Frances, Ont) ch5 20.2/10.1kW – CBWAT5 (Red Lake, Ont) ch10 0.570/0.285kW – CBWBT1 (The Pas Man) ch7 0.26/0.13kW – CBXAT1 (Peace River, Alta) ch7 0.72/0.36kW – CBNT1 (Port Rexton, Nfld) ch13 0.17/0.085kW – CBFCT1 (Magdalen Is, Que) ch12 1.48/0.74kW – CBWAT4 (Atikokan, Ont) ch7 0.544/0.272kW – CBUAT1 (Nelson, B.C) ch9 0.56/0.362kW – CBUAT2 (Castlegar, B.C) ch3 0.005/0.0025kW – CBUT1 (Courtenay, B.C) ch9 0.625/0.332kW – The Microwave network extends from St. John's Nfld, to Victoria.

D.Prgr: Approx 20.00–22.00, 05.00–07.00.

F.Pl: TVnetwork relay st at Deer Lake, Nfld, (Sept. 65), TVrebroadc. st's at Placentia (Sept. 65) and Marystown, Nfld (Oct 65).

Ampex Videotape, USA delivered to: CBC (Calgary, Edmonton, Halifax, Montreal, Ottawa, Toronto, Vancouver, Winnipeg) CFCN-TV, CHCT-TV, CJPM-TV, CFRN-TV, CBHT-TV, CJCH-TV, CHCH-TV, CKRS, Cent. ont. TV, CFCF-TV, CFTM-TV, CJOH-TV, CFCM-TV, CKMI-TV, TV Quebec, CKCK-TV, CKRN-TV, CHSJ-TV, CKSO-TV, CTV Network, CFTO, CHAN-TV, CKLW-TV, CJAY-TV, York TV, CKOS-TV.

The Marconi Company, Ltd, GB-TV tr's: Fox River 1×3W, 1 Amplifier 50W, Montreal CFTM 2×4kW, 2×1kW, Montreal CFCF 2×4, 2×1kW, Amplifiers 2×18kW, 2×10kW, Ottawa 1×4, 2×5kW, Amplifier 18kW, Ottawa CBC 5kW, Vancouver 5kW –Ant: Montreal. Studio Equip: Montreal, Montreal CFTM, Montreal CFCF, Ottawa CBC, Vancouver CBC – OBV: Vancouver CBC – Pye TVT, GB: Studio equip, OBV.

PRIVATE STATIONS (Comm.)

Rebroadc. st's and st's less 5kW not mentioned.

	Call	chA	kW	Location
	CHCT-TV	2	100/50	Calgary, Alta.
	CJIC-TV	2	28/15	Sault Ste. Marie, Ont.
	CKCK-TV	2	100/53.5	Regina, Sask.
	CKCW-TV	2	25/15	Monchton, N.B.
	CKPR-TV	2	55.4/30.2	Port Arthur, Ont.
	CKSA-TV	2	116/58	Lloydminster, Alta.
1)	CFRN-TV	3	180.3/90.43	Edmonton, Alta.
	CJBR-TV	3	49.3/28	Rimouski, Que.
	CKOS-TV	3	5/2.5	Yorkton, Sask.
2)	CKVR-TV	3	100/50	Barrie, Ont.
3)	CFCM-TV	4	100/50	Quebec, Ont.
4)	CFCN-TV	4	55/27.5	Calgary, Alta.
5)	CHAB-TV	4	48/25	Moose Jaw, Sask.
	CHSJ-TV	4	100/50	Saint John, N.B.
	CJCB-TV	4	100/60	Sydney, N.S.
	CJCN-TV	4	26/13	Grand Falls, Nfld.
	CKRN-TV	4	115/57.5	Rouyn, Que.
7)	CHAU-TV	5	100/50	Carleton, Que.
8)	CHOV-TV	5	36.8/18.35	Pembroke, Ont.
	CJCH-TV	5	52.8/26.4	Halifax, N.S.
	CJDC-TV	5	5/2.5	Dawson Creek, B.C.
	CJFB-TV	5	13.3/6.65	Swift Current, Sask.
	CKBI-TV	5	61/36.5	Prince Albert, Sask.
3)	CKMI-TV	5	13.85/6.77	Quebec, Que.
9)	CKSO-TV	5	50/15	Sudbury, Ont.
	CKX-TV	5	54/27	Brandon, Man.
	CFCL-TV	6	100/50	Timmins, Ont.
10)	CHAT-TV	6	6/3	Medicine Hat, Alta.
11)	CHCA-TV	6	26/13	Red Deer, Alta.
	CHEK-TV	6	100/50	Victoria, B.C.
	CJON-TV	6	62/33	St. John's, Nfld.
	CJPM-TV	6	61/36.5	Chicoutimi, P.Q.
	CHLT-TV	7	316/158	Sherbrooke, Que.
	CJAY-TV	7	325/180	Winnipeg, Man.
	CJLH-TV	7	96.1/44.9	Lethbridge, Alta.
	CKRT-TV	7	49/24.5	Rivière du Loup, P.Q.
	CFQC-TV	8	180/100	Saskatoon, Sask.
	CHAN-TV	8	164/81	Burnaby, B.C.
12)	CKNX-TV	8	180/100	Wingham, Ont.
	CKSS-TV	8	23/11.5	Yorkton, Sask.
13)	CFTO-TV	9	325/162	Toronto, Ont.
	CFXU-TV	9	73/37	Antigonish, N.S.
	CHRE-TV	9	140/75	Moose Jaw, Sask.
	CKBL-TV	9	153/92	Matane, Que.
	CKLW-TV	9	178/107	Windsor, Ont.
	CFCH-TV	10	28.5/14.25	Callander, Ont.
	CFPL-TV	10	325/195	London, Ont.
14)	CFTM-TV	10	325/162.5	Montreal, Que.
	CHCH-TV	11	230/143	Hamilton, Ont.
15)	CKWS-TV	11	250/130	Kingston, Ont.
16)	CFCF-TV	12	325/160	Montreal, P.Q.
17)	CHEX-TV	12	139/83.4	Peterborough, Ont.
	CKAM-TV	12	141/77	Moncton, N.B.
	CKRS-TV	12	20/10	Jonquière, Ont.
	CFCY-TV	13	38.6/19.3	Charlottetown, PEI
	CJOH-TV	13	152/76	Ottawa, Ont.
	CKCO-TV	13	325/160	Kitchener, Ont.
18)	CKTM-TV	13	255/162.5	Three Rivers, Que.

1) **Sunwapta Broadc. Co,** Broadc. House, Postal St. E, Edmonton, Alta. **D.Prgr:** 17.00–08.00.

2) **Ralph Snelgrove Television Ltd,** Box 519, Barrie, Ont. **D.Prgr:** 14.30–06.00.

3) **Télévision du Quebec (Canada) Limitée,** 1000 Myrand Ave, Quebec 10, P.Q. **L.P:** Gen. Mgr: J. A. Pouliot. Dir. Tec: G. Fortin. Film Buyer: G. Lovett. **D.Prgr:** ch4: 16.00–05.30 in French, ch5: 15.00–17.00, 20.00–04.30 in English.

4) **CFCN-TV Ltd,** Broadc. House, Calgary, Alta. **L.P:** Pres: J. A. Love. Dir. Tec: R. W. Lamb. Film Buyer: E. W. Chapmann.

5) **CHAB Ltd,** Johnston Bldg, Moose Jaw, Sask. D. Prgr: 17.00–06.00.

6) **Newfoundland Broadc. Co Ltd,** Grand Falls, Nfld. **D.Prgr:** 13.15–04.30.

7) **Television de la Baie des Chaleurs Inc,** Carleton, P.Q. **D.Prgr:** 15.00–07.00.

8) **Ottawa Valley TV Co. Ltd,** RR6, Pembroke, Ont. **L.P:** Pres: E. G. Archibald. Dir. Tec: O. Bradley. Film Buyer: B. Duval. **D.Prgr:** 15.00–05.40.

9) **CKSO Radio Ltd,** Box 400, Sudbury, Ont. **D.Prgr:** 13.00–07.00.

10) **Monarch Broadc. Co Ltd,** Box 760, Medicine Hat, Alta. **D.Prgr:** 19.00–08.30.

11) **CHCA Television Ltd,** Box 668, Red Deer, Alta. **L.P:** Gen. Mgr: G. A. Bartley. Dir. Tec: M. Lang. Film Buyer: A. Sole. **D.Prgr:** 16.30–07.00.

12) **R.St. CKNX Ltd,** Corner Carling Terrace and John Str, Wingham, Ont. **D.Prgr:** 17.00–06.30.

13) **Baton Broadc. Ltd,** 1550 Mc Covan Rd, Agincourt, Toronto, Ont. **D.Prgr:** 13.30–05.30.

14) **Télé-Metropole Corporation,** 1405 Maisonneuve St, Montreal, P.Q. **D.Prgr:** 15.00–06.30.

15) **Frontenac Broadc,** 170 Queen Str, Kingston, Ont. **L.P:** Gen. Mgr: R. Hofstetter. Dir. Tec: G. Backus. Film Buyer: D. Lawrie (425 Univ. Ave. Toronto). **D.Prgr:** 14.00–06.30.

16) **Canadian Marconi Co,** 405 Ogilvy Ave, Montreal 15. **D.Prgr:** 14.30–06.00.

17) **Kawartha Broadc. Co, Ltd,** Corner Hunter & Water Streets, Peterborough, Ont. **D.Prgr:** 15.00–06.00.

18) **Télévision St. Maurice Inc,** 1332, rue Notre Dame, Trois Rivières, P.Q. **D.Prgr:** 15.30–05.30.

Pye TVT, GB: Studio equip. to CJCH-TV, Halifax.

UNITED STATES OF AMERICA

Stations

ALABAMA
WAPI-TV (Ch 13) Birmingham
WBRC-TV (Ch 6) Birmingham
*WBIQ (Ch 10) Birmingham
WMSL-TV (Ch 23) Decatur
WTVY (Ch 4) Dothan
*WDIQ (Ch 2) Dozier
WOWL-TV (Ch 15) Florence
WAAY-TV (Ch 31) Huntsville
WHNT-TV (Ch 19) Huntsville
WALA-TV (Ch 10) Mobile
WKRG-TV (Ch 5) Mobile
WCOV-TV (Ch 20) Montgomery
WKAB-TV (Ch 32) Montgomery
WSFA-TV (Ch 12) Montgomery
*WAIQ (Ch 26) Montgomery
*WCIQ (Ch 7) Mount Cheaha State Park
WSLA-TV (Ch 8) Selma

ALASKA
KENI-TV (Ch 2) Anchorage
KTVA (Ch 11) Anchorage
KFAR-TV (Ch 2) Fairbanks
KTVF Ch 11) Fairbanks
KINY-TV (Ch 8) Juneau

ARIZONA
KOOL-TV (Ch 10) Phoenix
KPHO-TV (Ch 5) Phoenix
KTAR-TV (Ch 12) Phoenix
KTVK (Ch 3) Phoenix
*KAET (Ch 8) Phoenix
KGUN-TV (Ch 9) Tucson
KOLD-TV (Ch 13) Tucson
KVOA-TV (Ch 4) Tucson
*KUAT (Ch 6) Tucson
KBLU-TV (Ch 13) Yuma
KIVA (Ch 11) Yuma

ARKANSAS
KTVE (Ch 10) El Dorado
KFSA-TV (Ch 5) Fort Smith
KAIT-TV (Ch 8) Jonesboro
KARK-TV (Ch 4) Little Rock
KATV (Ch 7) Little Rock
KTHV (Ch 11) Little Rock

CALIFORNIA
KBAK-TV (Ch 29) Bakersfield
KERO-TV (Ch 23) Bakersfield
KLYD-TV (Ch 17) Bakersfield
KHSL-TV (Ch 12) Chico
KIEM-TV (Ch 3) Eureka
KVIQ-TV (Ch 12) Eureka
KAIL-TV (Ch 53) Fresno
KFRE-TV (Ch 30) Fresno
KICU-TV (Ch 43) Fresno
KJEO-TV (Ch 47) Fresno
KMJ-TV (Ch 24) Fresno
*KCET (Ch 28) Hollywood
KABC-TV (Ch 7) Los Angeles
KCOP- (Ch 13) Los Angeles
KHJ-TV (Ch 9) Los Angeles
KIIX-TV (Ch 22) Los Angeles
KMEX-TV (Ch 34) Los Angeles
KNBC (Ch 4) Los Angeles
KNXT (Ch 2) Los Angeles
KTLA (Ch 5) Los Angeles
KTTV (Ch 11) Los Angeles
KTVU (Ch 2) Oakland
KRCR-TV (Ch 7) Redding
KCRA-TV (Ch 3) Sacramento
KXTV (Ch 10) Sacramento
*KVIE (Ch 6) Sacramento
KSBW-TV (Ch 8) Salinas
*KVCR-TV (Ch 24) San Bernardino
KFMB-TV (Ch 8) San Diego
KOGO-TV (Ch 10) San Diego
KGO-TV (Ch 7) San Francisco
KPIX (Ch 5) San Francisco
KRON-TV (Ch 4) San Francisco
*KQED (Ch 9) San Francisco
KNTV (Ch 11) San Jose
KEYT (Ch 3) Santa Barbara
KCOY-TV (Ch 12) Santa Maria

COLORADO
KKTV (Ch 11) Colorado Springs
KRDO-TV (Ch 13) Colorado Springs
KBTV (Ch 9) Denver
KCTO (Ch 2) Denver
KLZ-TV (Ch 7) Denver
KOA-TV (Ch 4) Denver
*KRMA-TV (Ch 6) Denver
KREX-TV (Ch 5) Grand Junction
KOAA-TV (Ch 5) Pueblo

CONNECTICUT
*WEDH (Ch 24) Hartford
WHCT (Ch 18) Hartford
WHNB-TV (Ch 30) Hartford
WTIC-TV (Ch 3) Hartford
WNHC-TV (Ch 8) New Haven
WATR-TV (Ch 20) Waterbury

DISTRICT OF COLUMBIA
WMAL-TV (Ch 7) Washington
WOOK-TV (Ch 14) Washington
WRC-TV (Ch 4) Washington
WTOP-TV (Ch 9) Washington
WTTG (Ch 5) Washington
*WETA-TV (Ch 26) Washington

FLORIDA
WESH-TV (Ch 2) Daytona Beach
WINK-TV (Ch 11) Fort Myers
*WUFT (Ch 5) Gainesville
WFGA-TV (Ch 12) Jacksonville
*WJCT (Ch 7) Jacksonville
WJXT (Ch 4) Jacksonville
WCKT (Ch 7) Miami
WLBW-TV (Ch 10) Miami
*WSEC-TV (Ch 17) Miami
*WTHS-TV (Ch 2) Miami
WTVJ (Ch 4) Miami
WDBO-TV (Ch 6) Orlando
WFTV (Ch 9) Orlando
WJHG-TV (Ch 7) Panama City
WEAR-TV (Ch 3) Pensacola
WSUN-TV (Ch 38) St. Petersburg
WCTV (Ch 6) Tallahassee
*WFSU-TV (Ch 11) Tallahassee
WFLA-TV (Ch 8) Tampa
WTVT (Ch 13) Tampa
*WEDU (Ch 3) Tampa-St. Petersburg
WEAT-TV (Ch 12) West Palm Beach
WPTV (Ch 5) West Palm Beach

GEORGIA
WALB-TV (Ch 10) Albany
*WGTV (Ch 8) Athens
WAGA-TV (Ch 5) Atlanta
WAII-TV (Ch 11) Atlanta
*WETV (Ch 30) Atlanta
WSB-TV (Ch 2) Atlanta
WJBF (Ch 6) Augusta
WRDW-TV (Ch 12) Augusta
*WJSP-TV (Ch 28) Columbus
WRBL-TV (Ch 3) Columbus
WTVM (Ch 9) Columbus
WMAZ-TV (Ch 13) Macon
WSAV-TV (Ch 3) Savannah
WTOC-TV (Ch 11) Savannah
*WVAN-TV (Ch 9) Savannah
*WXGA-TV (Ch 8) Waycross

HAWAII
KGMB-TV (Ch 9) Honolulu
KHVH-TV (Ch 4) Honolulu
KONA (Ch 2) Honolulu
KTRG-TV (Ch 13) Honolulu

IDAHO
KBOI-TV (Ch 2) Boise
KTVB (Ch 7) Boise
KID-TV (Ch 3) Idaho Falls
KIFI-TV (Ch 8) Idaho Falls
KMVT (Ch 11) Twin Falls

ILLINOIS
*WSIU (Ch 8) Carbondale
WCHU (Ch 33) Champaign
WCIA (Ch 3) Champaign
WBBM-TV (Ch 2) Chicago
WBKB (Ch 7) Chicago
WCIU (Ch 26) Chicago
WGN-TV (Ch 9) Chicago
WMAQ-TV (Ch 5) Chicago
*WTTW (Ch 11) Chicago
WICD (Ch 24) Danville
WTVP (Ch 17) Decatur
WSIL-TV (Ch 3) Harrisburg
WQAD-TV (Ch 8) Moline
WEEK-TV (Ch 43) Peoria
WMBD-TV (Ch 31) Peoria
WTVH (Ch 19) Peoria
KHQA-TV (Ch 7) Quincy
WGEM-TV (Ch 10) Quincy
WREX-TV (Ch 13) Rockford
WTVO (Ch 39) Rockford
WHBF-TV (Ch 4) Rock Island
WICS (Ch 20) Springfield
*WILL-TV (Ch 12) Urbana-Champaign

INDIANA
WEHT-TV (Ch 50) Evansville
WFIE-TV (Ch 14) Evansville
WTYW (Ch 7) Evansville
WANE-TV (Ch 15) Fort Wayne
WKJG-TV (Ch 23) Fort Wayne
WPTA (Ch 21) Fort Wayne
WFBM-TV (Ch 6) Indianapolis
WISH-TV (Ch 8) Indianapolis
WLW-I (Ch 13) Indianapolis
WTTV (Ch 4) Indianapolis
WFAM-TV (Ch 18) Lafayette
WTAF-TV (Ch 31) Marion
WLBC-TV (Ch 49) Muncie
WNDU-TV (Ch 16) South Bend
WSBT-TV (Ch 22) South Bend
WSJV-TV (Ch 28) South Bend
WTHI-TV (Ch 10) Terre Haute

IOWA
WOI-TV (Ch 5) Ames
KCRG-TV (Ch 9) Cedar Rapids
WMT-TV (Ch 2) Cedar Rapids
WOC-TV (Ch 6) Davenport
*KDPS-TV (Ch 11) Des Moines
KRNT-TV (Ch 8) Des Moines
WHO-TV (Ch 13) Des Moines
KQTV (Ch 21) Fort Dodge
KGLO-TV (Ch 3) Mason City
KTVO (Ch 3) Ottumwa
KTIV (Ch 4) Sioux City
KVTV (Ch 9) Sioux City
KWWL-TV (Ch 7) Waterloo

KANSAS
KTVC (Ch 6) Dodge City
KAYS-TV (Ch 7) Hays
KOAM-TV (Ch 7) Pittsburg
WIBW-TV (Ch 13) Topeka
KAKE-TV (Ch 10) Wichita
KARD-TV (Ch 3) Wichita
KTVH (Ch 12) Wichita

KENTUCKY
WLTV (Ch 13) Bowling Green
WKYT-TV (Ch 27) Lexington
WLEX-TV (Ch 18) Lexington
WAVE-TV (Ch 3) Louisville
WHAS-TV (Ch 11) Louisville
WLKY-TV (Ch 32) Louisville
*WFPK-TV (Ch 15) Louisville
WPSD-TV (Ch 6) Paducah

LOUISIANA
KALB-TV (Ch 5) Alexandria
WAFB-TV (Ch 9) Baton Rouge
WBRZ (Ch 2) Baton Rouge
KATC (Ch 3) Lafayette
KLFY-TV (Ch 10) Lafayette
KPLC-TV (Ch 7) Lake Charles
KNOE-TV (Ch 8) Monroe
*KLSE (Ch 13) Monroe
WDSU-TV (Ch 6) New Orleans
WVUE (Ch 12) New Orleans
WWL-TV (Ch 4) New Orleans
*WYES-TV (Ch 8) New Orleans
KSLA-TV (Ch 12) Shreveport
KTAL-TV (Ch 6) Shreveport
KTBS-TV (Ch 3) Shreveport

MAINE
WABI-TV (Ch 5) Bangor
WLBZ-TV (Ch 2) Bangor
*WCBB (Ch 10) Lewiston
*WMEB-TV (Ch 12) Orono
WMTW-TV (Ch 8) Poland Spring
WCSH-TV (Ch 6) Portland
WGAN-TV (Ch 13) Portland
WAGM-TV (Ch 8) Presque Isle
*WMEM-TV (Ch 10) Presque Isle

MARYLAND
WBAL-TV (Ch 11) Baltimore
WJZ-TV (Ch 13) Baltimore
WMAR-TV (Ch 2) Baltimore
WBOC-TV (Ch 16) Salisbury

MASSACHUSETTS
WBZ-TV (Ch 4) Boston
WHDH-TV (Ch 5) Boston
WNAC-TV (Ch 7) Boston
*WGBH-TV (Ch 2) Boston
WRLP (Ch 32) Greenfield
WTEV (Ch 6) New Bedford
WHYN-TV (Ch 40) Springfield
WWLP (Ch 22) Springfield
WJZB (Ch 14) Worcester

MICHIGAN
WNEM-TV (Ch 5) Bay City
WWTV (Ch 9) Cadillac
WTOM-TV (Ch 4) Cheboygan
WJBK-TV (Ch 2) Detroit
*WTVS (Ch 56) Detroit
WWJ-TV (Ch 4) Detroit
WXYZ-TV (Ch 7) Detroit
WJRT (Ch 12) Flint
WOOD-TV (Ch 8) Grand Rapids
WZZM-TV (Ch 13) Grand Rapids
WKZO-TV (Ch 3) Kalamazoo
WJIM-TV (Ch 6) Lansing
WLUC-TV (Ch 6) Marquette
WILX-TV (Ch 10) Onondaga
*WMSB (Ch 10) Onondaga-East Lansing
WKNX-TV (Ch 57) Saginaw
WPBN-TV (Ch 7) Traverse City

MINNESOTA
KCMT (Ch 7) Alexandria
KMMT (Ch 6) Austin
KDAL-TV (Ch 3) Duluth
WDSM-TV (Ch 6) Duluth
*WDSE-TV (Ch 8) Duluth
KEYC-TV (Ch 12) Mankato
KMSP-TV (Ch 9) Minneapolis
WCCO-TV (Ch 4) Minneapolis
WTCN-TV (Ch 11) Minneapolis
KROC-TV (Ch 10) Rochester
KSTP-TV (Ch 5) St. Paul
*KTCA-TV (Ch 2) St. Paul-Minneapolis

MISSISSIPPI
WLOX-TV (Ch 13) Biloxi
WCBI-TV (Ch 4) Columbus
WABG-TV (Ch 6) Greenwood
WDAM-TV (Ch 7) Hattiesburg
WJTV (Ch 12) Jackson
WLBT (Ch 3) Jackson

USA

WTOK-TV (Ch 11) Meridian
WTWV (Ch 9) Tupelo

MISSOURI

KFVS-TV (Ch 12) Cape Girardeau
KOMU-TV (Ch 8) Columbia
KRCG-TV (Ch 13) Jefferson City
KODE-TV (Ch 12) Joplin
KCMO-TV (Ch 5) Kansas City
KMBC-TV (Ch 9) Kansas City
WDAF-TV (Ch 4) Kansas City
*KCSD-TV (Ch 19) Kansas City
KFEQ-TV (Ch 2) St. Joseph
KMOX-TV (Ch 4) St. Louis
KPLR-TV (Ch 11) St. Louis
KSD-TV (Ch 5) St. Louis
KTVI (Ch 2) St. Louis
*KETC (Ch 9) St. Louis
KTTS-TV (Ch 10) Springfield
KYTV (Ch 3) Springfield

MONTANA

KOOK-TV (Ch 2) Billings
KULR-TV (Ch 8) Billings
KXLF-TV (Ch 4) Butte
KXGN-TV (Ch 5) Glendive
KFBB-TV (Ch 5) Great Falls
KRTV (Ch 3) Great Falls
KBLL-TV (Ch 12) Helena
KMSO-TV (Ch 13) Missoula

NEBRASKA

KHAS-TV (Ch 5) Hastings
KHOL-TV (Ch 13) Holdrege
KOLN-TV (Ch 10) Lincoln
*KUON-TV (Ch 12) Lincoln
KNOP-TV (Ch 2) North Platte
KETV (Ch 7) Omaha
KMTV (Ch 3) Omaha
WOW-TV (Ch 6) Omaha

NEVADA

KLAS-TV (Ch 8) Las Vegas
KORK-TV (Ch 2) Las Vegas
KSHO-TV (Ch 13) Las Vegas
KCRL (Ch 4) Reno
KOLO-TV (Ch 8) Reno

NEW HAMPSHIRE

*WENH (Ch 11) Durham
WMUR-TV (Ch 9) Manchester

NEW MEXICO

KGGM-TV (Ch 13) Albuquerque
*KNME-TV (Ch 5) Albuquerque
KOAT-TV (Ch 7) Albuquerque
KOB-TV (Ch 4) Albuquerque
KAVE-TV (Ch 6) Carlsbad
KSWS-TV (Ch 8) Roswell

NEW YORK

WAST (Ch 13) Albany
W-TEN (Ch 10) Albany
WBJA-TV (Ch 34) Binghamton
WINR-TV (Ch 40) Binghamton
WNBF-TV (Ch 12) Binghamton
WBEN-TV (Ch 4) Buffalo
WGR-TV (Ch 2) Buffalo
WKBW-TV (Ch 7) Buffalo
*WNED-TV (Ch 17) Buffalo
WABC-TV (Ch 7) New York
WCBS-TV (Ch 2) New York
WNBC-TV (Ch 4) New York
*WNDT (Ch 13) New York
WNEW-TV (Ch 5) New York
*WNYC-TV (Ch 31) New York
WOR-TV (Ch 9) New York
WPIX (Ch 11) New York
WPTZ-TV (Ch 5) Plattsburgh
WHEC-TV (Ch 10) Rochester
WOKR (Ch 13) Rochester
WROC-TV (Ch 8) Rochester
*WMHT (Ch 17) Schenectady
WRGB (Ch 6) Schenectady
WHEN-TV (Ch 5) Syracuse
WNYS-TV (Ch 9) Syracuse
WSYR-TV (Ch 3) Syracuse
WKTV (Ch 2) Utica
WCNY-TV (Ch 7) Watertown

NORTH CAROLINA

WISE-TV (Ch 62) Asheville
WLOS-TV (Ch 13) Asheville
*WUNC-TV (Ch 4) Chapel Hill
WBTV (Ch 3) Charlotte
WSOC-TV (Ch 9) Charlotte
*WTVI (Ch 42) Charlotte
WTVD (Ch 11) Durham
WFMY-TV (Ch 2) Greensboro
WNCT (Ch 9) Greenville
WGHP-TV (Ch 8) High Point
WNBE-TV (Ch 12) New Bern
WRAL-TV (Ch 5) Raleigh
WITN-TV (Ch 7) Washington
WECT (Ch 6) Wilmington
WSJS-TV (Ch 12) Winston-Salem

NORTH DAKOTA

KFYR-TV (Ch 5) Bismarck
KXMB-TV (Ch 12) Bismarck
KDIX-TV (Ch 2) Dickinson
*KFME (Ch 13) Fargo
KTHI-TV (Ch 11) Fargo
WDAY-TV (Ch 6) Fargo
KCND-TV (Ch 12) Pembina
KXJB-TV (Ch 4) Valley City

OHIO

WAKR-TV (Ch 49) Akron
*WOUB-TV (Ch 20) Athens
*WBGU-TV (Ch 70) Bowling Green
*WCET (Ch 48) Cincinnati
WCPO-TV (Ch 9) Cincinnati
WKRC-TV (Ch 12) Cincinnati
WLW-T (Ch 5) Cincinnati
KYW-TV (Ch 3) Cleveland
WEWS (Ch 5) Cleveland
WJW-TV (Ch 8) Cleveland
WBNS-TV (Ch 10) Columbus
WLW-C (Ch 4) Columbus
*WOSU-TV (Ch 34) Columbus
WTVN-TV (Ch 6) Columbus
WHIO-TV (Ch 7) Dayton
WLW-D (Ch 2) Dayton
WIMA-TV (Ch 35) Lima
*WGSF (Ch 28) Newark
*WMUB-TV (Ch 14) Oxford
WSTV-TV (Ch 9) Steubenville
*WGTE-TV (Ch 30) Toledo
WSPD-TV (Ch 13) Toledo
WTOL-TV (Ch 11) Toledo
WFMJ-TV (Ch 21 Youngstown
WKBN-TV (Ch 27) Youngstown
WYTV (Ch 33) Youngstown
WHIZ-TV (Ch 18) Zanesville

OKLAHOMA

KTEN (Ch 10) Ada
KXII (Ch 12) Ardmore
KSWB-TV (Ch 8) Elk City
KSWO-TV (Ch 7) Lawton
*KETA (Ch 13) Oklahoma City
KOCO-TV (Ch 5) Oklahoma City
*KOKH-TV (Ch 25) Oklahoma City
KWTV (Ch 9) Oklahoma City
WKY-TV (Ch 4) Oklahoma
*KOED-TV (Ch 11) Tulsa City
KOTV (Ch 6) Tulsa
KTUL-TV (Ch 8) Tulsa
KVOO-TV (Ch 2) Tulsa

OREGON

*KOAC-TV (Ch 7) Corvallis
KEZI-TV (Ch 9) Eugene
KVAL-TV (Ch 13) Eugene
KOTI-TV (Ch 2) Klamath Falls
KBES-TV (Ch 5) Medford
KMED-TV (Ch 10) Medford
KATU (Ch 2) Portland
KGW-TV (Ch 8) Portland
*KOAP-TV (Ch 10) Portland
KOIN-TV (Ch 6) Portland
KPTV (Ch 12) Portland

PENNSYLVANIA

WFBG-TV (Ch 10) Altoona
WICU-TV (Ch 12) Erie
WSEE-TV (Ch 35) Erie
WHP-TV (Ch 21) Harrisburg
WTPA (Ch 27) Harrisburg
WARD-TV (Ch 56) Johnstown
WJAC-TV (Ch 6) Johnstown
WGAL-TV (Ch 8) Lancaster
WLYH-TV (Ch 15) Lebanon
WCAU-TV (Ch 10) Philadelphia
WFIL-TV (Ch 6) Philadelphia
*WHYY-TV (Ch 12) Philadelphia
WRCV-TV (Ch 3) Philadelphia
*WUHY-TV (Ch 35) Philadelphia
KDKA-TV (Ch 2) Pittsburgh
WIIC (Ch 11) Pittsburgh
*WQED (Ch 13) Pittsburgh
*WQEX (Ch 16) Pittsburgh
WTAE (Ch 4) Pittsburgh
WDAU-TV (Ch 22) Scranton
WNEP-TV (Ch 16) Scranton
WBRE-TV (Ch 28) Wilkes-Barre
WSBA-TV (Ch 43) York

RHODE ISLAND

WJAR-TV (Ch 10) Providence
WPRO-TV (Ch 12) Providence

SOUTH CAROLINA

WAIM-TV (Ch 40) Anderson
WCIV (Ch 4) Charleston
WCSC-TV (Ch 5) Charleston
*WITV (Ch 6) Charleston
WUSN-TV (Ch 2) Charleston
WIS-TV (Ch 10) Columbia
WNOK-TV (Ch 19) Columbia
WOLO-TV (Ch 25) Columbia
WBTW (Ch 13) Florence
WFBC-TV (Ch 4) Greenville
*WNTV (Ch 29) Greenville
WSPA-TV (Ch 7) Spartanburg

SOUTH DAKOTA

KXAB-TV (Ch 9) Aberdeen
KORN-TV (Ch 5) Mitchell
KOTA-TV (Ch 3) Rapid City
KRSD-TV (Ch 7) Rapid City
KELO-TV (Channel 11) Sioux Falls
KSOO-TV (Ch 13) Sioux Falls
*KUSD-TV (Ch 2) Vermillion

TENNESSEE

WDEF-TV (Ch 12) Chattanooga
WRCB-TV (Ch 3) Chattanooga
WTVC (Ch 9) Chattanooga
WDXI-TV (Ch 7) Jackson
WJHL-TV (Ch 11) Johnson City
WATE-TV (Ch 6) Knoxville
WBIR-TV (Ch 10) Knoxville
WTVK (Ch 26) Knoxville
WHBQ-TV (Ch 13) Memphis
*WKNO-TV (Ch 10) Memphis
WMCT (Ch 5) Memphis
WREC-TV (Ch 3) Memphis
*WDCN-TV (Ch 2) Nashville
WLAC-TV (Ch 5) Nashville
WSIX-TV (Ch 8) Nashville
WSM-TV (Ch 4) Nashville

TEXAS

KRBC-TV (Ch 9) Abilene
KVLF-TV (Ch 12) Alpine
KFDA-TV (Ch 10) Amarillo
KFDW-TV (Ch 12) Amarillo
KGNC-TV (Ch 4) Amarillo
KVII-TV (Ch 7) Amarillo
*KLRN-TV (Ch 9) Austin
KTBC-TV (Ch 7) Austin
KBMT-TV (Ch 12) Beaumont
KFDM-TV (Ch 6) Beaumont
KIII (Ch 3) Corpus Christi
KRIS-TV (Ch 6) Corpus Christi
KZTV (Ch 10) Corpus Christi
*KERA-TV (Ch 13) Dallas
WFAA-TV (Ch 8) Dallas
KRLD-TV (Ch 4) Dallas
KELP-TV (Ch 13) El Paso
KROD-TV (Ch 4) El Paso
KTSM-TV (Ch 9) El Paso
KTVT (Ch 11) Fort Worth
WBAP-TV (Ch 5) Fort Worth
KGBT-TV (Ch 4) Harlingen
KHOU-TV (Ch 11) Houston
KPRC-TV (Ch 2) Houston
KTRK-TV (Ch 13) Houston
*KUHT (Ch 8) Houston
KGNS-TV (Ch 8) Laredo
KCBD-TV (Ch 11) Lubbock
KLBK (Ch 13) Lubbock
*KTXT-TV (Ch 5) Lubbock
KTRE-TV (Ch 9) Lufkin
KMID-TV (Ch 2) Midland
KVKM-TV (Ch 9) Monahans
KOSA-TV (Ch 7) Odessa
KPAC-TV (Ch 4) Port Arthur
*KRET-TV (Ch 23) Richardson
KCTV (Ch 8) San Angelo
KENS-TV (Ch 5) San Antonio
KONO-TV (Ch 12) San Antonio
KWEX-TV (Ch 41) San Antonio
WOAI-TV (Ch 4) San Antonio
KPAR-TV (Ch 12) Sweetwater
KCEN-TV (Ch 6) Temple
KLTV (Ch 7) Tyler
KWTX-TV (Ch 10) Waco
KRGV-TV (Ch 5) Weslaco
KAUZ-TV (Ch 6) Wichita Falls
KFDX-TV (Ch 3) Wichita Falls

UTAH

*KUSU-TV (Ch 12) Logan
*KOET (Ch 9) Ogden
*KWCS-TV (Ch 18) Ogden
KCPX-TV (Ch 4) Salt Lake City
KSL-TV (Ch 5) Salt Lake City
*KUED (Ch 7) Salt Lake City
KUTV (Ch 2) Salt Lake City

VERMONT

WCAX-TV (Ch 3) Burlington

VIRGINIA

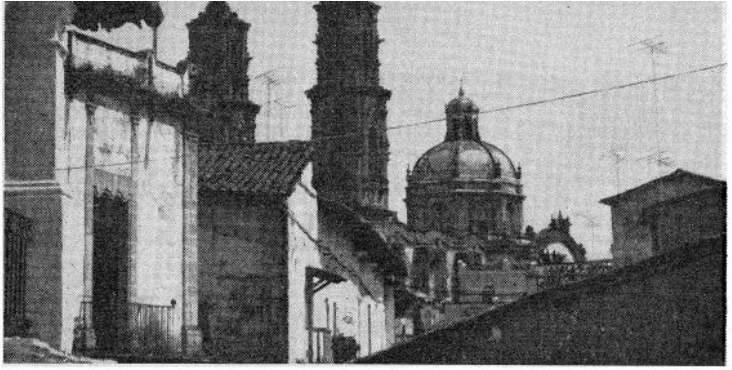
WCYB-TV (Ch 5) Bristol
WSVA-TV (Ch 3) Harrisonburg
WLVA-TV (Ch 13) Lynchburg
WTAR-TV (Ch 3) Norfolk
WVEC-TV (Ch 13) Norfolk
*WHRO-TV (Ch 15) Norfolk
WXEX-TV (Ch 8) Petersburg
WAVY-TV (Ch 10) Portsmouth
WRVA-TV (Ch 12) Richmond
WTVR (Ch 6) Richmond
*WCVE (Ch 23) Richmond
WDBJ-TV (Ch 7) Roanoke
WSLS-TV (Ch 10) Roanoke

WASHINGTON

KVOS-TV (Ch 12) Bellingham
*KWSC-TV (Ch 10) Pullman
*KCTS-TV (Ch 9) Seattle
KING-TV (Ch 5) Seattle
KIRO-TV (Ch 7) Seattle
KOMO-TV (Ch 4) Seattle
KHQ-TV (Ch 6) Spokane
KREM-TV (Ch 2) Spokane
KXLY-TV (Ch 4) Spokane
*KPEC-TV (Ch 56) Tacoma
KTNT-TV (Ch 11) Tacoma
*KTPS (Ch 62) Tacoma
KTVW-TV (Ch 13) Tacoma
KIMA-TV (Ch 29) Yakima
KNDO-TV (Ch 23) Yakima
*KYVE-TV (Ch 47) Yakima

WEST VIRGINIA

WHIS-TV (Ch 6) Bluefield
WCHS-TV (Ch 8) Charleston
WBOY-TV (Ch 12) Clarksburg
WHTN-TV (Ch 13) Huntington



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$1,081,000.

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Full sponsorship of a hit half hour show. In prime time. On 52 stations. In 23 countries. Reaching more than 16,000,000 TV homes.

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Option-time arrangements that make optimum time periods available. Centralized buying procedures—and special time discounts—that can save your company a good deal of money. Flexibility enough so that you can use the entire network—or any of the 52 stations.

If you have a product that you want to move abroad, ABC International Television has the ticket for you.

We'll air your commercials on our ABC Worldvision Network.

And millions of responsive families will get the message!

The ABC Worldvision Network: Canada, Mexico, Dominican Republic, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Venezuela, Ecuador, Brazil, Argentina, Lebanon, Iran, Nigeria, Japan, Okinawa, Philippines, Australia, Syria, Haiti, Netherlands Antilles.

ABC International Television, Inc.

A Subsidiary of American Broadcasting-Paramount Theatres, Inc.,
7 West 66th Street, New York 23, New York. SU 7-5000, Cable: AMBROCASTS

London: Richard Job Limited, 109 Park Street, London, W. 1, England, Cable: DICKJOB LONDONWI
Tokyo: American Broadcasting Company, Rm. 615, Asahi Shimbun Building, Yurakucho, Chiyoda-ku, Tokyo, Japan, Cable: AMCOCASTS

WSAZ-TV (Ch 3) Huntington
WOAY-TV (Ch 4) Oak Hill
WTAP-TV (Ch 15) Parkersburg
WJPB-TV (Ch 5) Weston
WTRF-TV (Ch 7) Wheeling

WISCONSIN

WEAU-TV (Ch 13) Eau Claire
WBAY-TV (Ch 2) Green Bay
WFRV (Ch 5) Green Bay
WLUK-TV (Ch 11) Green Bay
WKBT (Ch 8) La Crosse
*WHA-TV (Ch 21) Madison
WISC-TV (Ch 3) Madison
WKOW-TV (Ch 27) Madison
WMTV (Ch 15) Madison
WISN-TV (Ch 12) Milwaukee
WITI-TV (Ch 6) Milwaukee
*WMVS (Ch 10) Milwaukee
*WMVT (Ch 36) Milwaukee
WTMJ-TV (Ch 4) Milwaukee
WUHF-TV (Ch 18) Milwaukee
WSAU-TV (Ch 7) Wausau

WYOMING

KTWO-TV (Ch 2) Casper
KFBC-TV (Ch 5) Cheyenne
KWRB-TV (Ch 10) Riverton

*=Educational station

THE ARMED FORCES RADIO & TELEVISION SERVICE
A: Army, AF: Air Force, N: Navy; RCA: Royal Canadian Army.

AREAS:		chA	Watts
Alaskan			
Adak	N	8	100
Ft. Greely	A	8	180
Galena	AF	8	130
Kodiak	N	8	180
King Salmon	AF	8	200
Northeast Cape	AF	11	90
Shemya	AF	3	1
Stephenville	AF	8	300
Caribbean			
F. Clayton[2]	A	8	500
Guantanamo[3]	N	8	108
F. Davis	A	10	200
Roosevelt Rds[1]	N	8	19
Aguadilla[1]	AF	21	300
No. Atlantic			
Goose Bay[4]	AF	8	346
Sondrestrom[7]	AF	8	168
Thule AFB[7]	AF	8	100
Keflavik[8]	N	8	250
Terceira[5]	AF	8	180
Pacific			
Midway[9]	N	4	150
N. African			
Tripoli[10]	AF	8	2.1kW
Asmara[11]	A	8	100
European			
Spangdahlem[12]	AF	22	10kW
Iraklion[13]	AF	8	300
Ramstein[13]	AF	26	1kW
Near East, Far East			
Adana[19]	AF	3	
Teheran[14]	A	8	650
Peshawar[20]	AF	11	
Okinawa[16]	AF	8	42.5kW
AFKN[17]: see Korea			
Clark[18]	AF	8	150
Misawa[15];	AF	73	600
Chitose[15]	AF	73	1kW

[1] Puerto Rico. [2] Panama Canal Zone. [3] Cuba. [4] Canada. [5] Azores. [6] Bermuda. [7] Greenland. [8] Iceland. [9] Marshall Isl. [10] Libya. [11] Eritrea. [12] Germany. [13] Greece. [14] Iran. [15] Japan. [16] Ryukyu Isl. [17] Korea. [18] Philippines. [19] Turkey. [20] Pakistan.

Continental Electronics, USA: Tr's US Air Force Hamilton AFB, Puerto Rico VHF 250W.

AMERICAN BROADCASTING CO. (A division of American Broadc: Paramount Theatres, Inc.) – **Addr:** 7 West 66th St, New York 23, N.Y. **Te:** See radio – **L.P:** Pres: L. H. Goldenson. Vice Pres. & Gen. Mgr of ABC-TV Network: J. Barnathan. Press Inf: M. J. Foster. **Owned and operated st's:** WABC-TV New York, WBKB Chicago, WXYZ-TV Detroit, KABC-TV Los Angeles, KGO-TV S. Francisco.

COLUMBIA BROADCASTING SYSTEM INC, 485 Madison Av, New York 22, N.Y. **Te:** See Sound Broadc – **Owned and operated st's:** WCBS-TV, New York, WBBM-TV, Chicago, KNXT, Los Angeles, WCAU-TV, Philadelphia, KMOX-TV, St. Louis.

NATIONAL BROADCASTING COMPANY, INC.
Addr: RCA Building, New York, N.Y. 10020 – **L.P:** Chmn of the Board: R. W. Sarnoff. Pres: R. E. Kintner. Exec. Vice-Pres. TV-net: W. D. Scott. Vice-Pres. Corporate Inf: R. Kasmire – **Owned st's:** WNBC-TV 30 Rockefeller Plaza, New York 20, N.Y – WRC-TV 4001 Nebraska Ave, Washington 16, D.C – WMAQ Merchandise Mart, Chicago 54, Ill – WRCV-TV 1619 Walnut Str, Philadelphia 3, Pa – KNBC Los Angeles, Cal.

CENTRAL AMERICA

BARBADOS

CARIBBEAN BROADCASTING CORPORATION (Go, Comm.)
Fi: By adv. and license fee – **Fee:** WI $ 10.00 – **Ad:** 8 min's per h. **Addr:** P.O. Box 795, Barbados. **Te:** 2163. **Cable:** Cabroco – **L.P:** Gen. Mgr: P. S. Watson. Dir. Tec: J. C. Luttrell – **Station** (System: Can. Gen. Electric): chA3 5/2.5kW H – **D.Prgr:** 22.00–02.00.

COSTA RICA

TELEVISORA DE COSTA RICA (Comm.)
Addr: Apt. 3876 San José. **Cable:** Television. **Te:** 2537 – **L.P:** Dir: R. Picado. Dir. Tec: Eng. C. M. Reyes – **Station:** TI-TVCR chA7 3.5/1.6kW – **Rel. st's:** Villa Mills 4.5kW, Zarcero 5.4kW, Turrialba Volcano chA7 1.5kW, Golfito chA4 1.3kW – **D.Prgr:** 20.00–04.00.

R. TELEVISION TIC-TAC (Comm.)
Addr: Apt. 4666, San José. **Te:** 3283. **Cable:** Tictac – **L.P:** Gen. Mgr: A. Vargas V – **Station:** chA9 2.86/0.48kW H – **D.Prgr:** 10.00–04.00 – **F.P1:** Relay st. chA4 25/12.5kW H (Dec. 64), chA9 (March 65).

Projected station:
Televisora TI-TV – Addr: Apt. 512, San José – **L.P:** Gen. Mgr: M. Sotela P – **Station:** chA6 (to operate at the beginning of 1965).

CUBA

TELEVISION STATIONS:

CM	ch	kW	Pol: H.	Location
AB-TV	2	110		Havana*
KU-TV	2	14/7		Santiago de Cuba**
H-TV	3	31/15.5		Santa Clara*
KJ-TV	3	27.5/13.25		Holguin*
BF-TV	4	125/62.5		Havana*
J-TV	4	25		Camaguey*
HQ-TV	5	25.6		Santa Clara**
LB-TV	5	14.3		Santiago de Cuba*
JL-TV	6	56.2/28		Camaguey**
Q-TV	6	125/62.5		Havana**
BA-TV	7	51		Havana*
FD-TV	7	18.5/9.25		Ciego de Avila**
LC-TV	7	32		Santiago de Cuba*
LD-TV	8	5/2.5		Holguin*
RA-TV	8			Santa Clara*
FE-TV	9	32		Camaguey*
GQ-TV	9	28		Matanzas**
TV	10	25		Havana*
FG-TV	11			Camaguey**
GH-TV	11	32		Matanzas*
BJ-TV	12	115		Havana (Colour)
FF-TV	12	32		Jatibonica*
G-TV	13	28		Matanzas*

* **CMBF-TV: Addr:** Mazon y San Miguel, Habana.
** **CMQ-TV: Addr:** Radiocentro, Habana – **D.Prgr:** W 16.30–04.00 Havana st's CMAB-TV e CMBF-TV are operated as one network by the Go. CMQ-TV is operated as a second network with Go-Prgr's.

DOMINICAN REPUBLIC

RADIO SANTO DOMINGO-TV (Comm.)
Addr: Calle Dr. Tejada Florentine 8, Santo Domingo. **Cable:** Dominicana. **Te:** 2-3195 – **L.P:** Dir. Gen: César Gimbernard – **Station:** HISD-TV chA4 5/2.5kW – Satellites: La Cumbre chA9 0.5/0.25kW, Santo Berro chA2 5/0.25kW – **D.Prgr:** 21.00–03.30.

RAHINTEL TELEVISION (Comm.)
Addr: Apt. 287, Sto. Domingo. **Cable:** Rahin. **Te:** 3-1011 – **Station:** chA7 1/0.6kW H, chA11 (Santiago) 1/0.5kW (not operating) – **L.P:** Dir. Gen: A. Cannizare – **D.Prgr:** 22.25–02.30.

EDITORA DEL CARIBE TELEVISION – **Addr:** Sto. Domingo. **Stations:** HIBJ-TV chA2 5kW, chA13 5kW (Santiago) not operating. **Projected:** R. HIZ-TV, Sto. Domingo. **Station:** chA10 0.5/0.25kW.

EL SALVADOR

TELECENTRO S.A. – **Addr:** Apt. 1375, San Salvador. **Cable:** Telecentre. **Te:** 6227 – **L.P:** Gen. Mgr: A. Vilar. Dir. Tec: R. H. Rahn. **Stations:** YSU-TV chA4 10kW H; YSEB-TV chA6 0.5kW; YSDR-TV chA8 5kW – **D.Prgr:** chA4 17.00–06.00; chA6 23.00–05.00.

Projected: Televisión Centroamericano, S.A. (TECASA), chA2.

GUATEMALA

TELEVISION NACIONAL (Go.): **Addr:** & **L.P:** see radio. **Station:** TGW-TV ch A8 1/0.5kW – **D.Prgr:** 00.00–04.00.
Projected: ch A5 10/5kW in 1965.

RADIO-TELEVISION GUATEMALA S.A. (Comm.): **Addr:** Apt. 1367, Guatemala. **Cable:** Television. **Te:** 24-1-24 – **L.P:** Gen. Mgr: W.G. Campbell – **Station:** TG-BOL-TV ch A3 5/2.5kW H.

LA VOZ DE CENTRO AMERICA (Comm.): **Addr:** 7a Av. 1-19, Z-9, Guatemala – **Station:** TGTV ch A11 1/0.5kW.

HAITI

TELE-HAITI (Comm.): **Addr:** P.O. Box 1126, Port-au-Prince. **Cable:** Telehaiti. **Te:** 2278 – **L.P:** Dir. Gen: A.S. Apaid. Dir. Tec: E. C. Gentil – **Station:** 4VMR-TV ch A5 2/0.7kW V – **D.Prgr:** 17.00–03.00.

HONDURAS (REP).

COMPAÑIA TELEVISORA HONDUREÑA S.A. (Comm.): **Addr:** Apt. Postal 734 Tegucigalpa. **Te:** 12-93 – **L.P:** Dir. Gen: M. Brooks H. Dir. Tec: A.D. Lardizabal – **Station:** HRTG-TV ch A5 4/2kW V. **Rel. st's:** HRSU-TV ch A9 20kW (El Socorro) – HRYA-TV ch A13 7kW (San Pedro Sula) – **D.Prgr:** 18.00–20.00, 23.00–05.00 – **Projected st:** R. Centro and La Voz de Honduras.

JAMAICA

JAMAICA BROADCASTING CORPORATION (Comm.)
Fi: By adv. only – **Addr. & L.P:** See radio – **Stations** (Systems: Can. Gen. Electric, Selenia, Italy): Kingston chA11 0.28/0.14kW H – **Relay st's** (Pol: H): Coopers Hill chA7 20.5/10.25kW, Port Antonio chA8 0.16/0.8kW, Montego Bay chA11 1/0.5kW, Oracabessa chA12 1/0.5kW, Spur-Tree chA13 23/21.5kW – **D.Prgr's:** W 22.30–03.00, Sun 21.00–03.00.

EMI, PYE, TVT, GB, delivered studio equip.

MEXICO

*=affiliated to Telesistema Mexicano – All st's comm. exc. XEIP.

INSTITUTO POLITECNICO NACIONAL (Cult): **Addr:** Casco de Sante Tomas, México, DF – **Station:** XEIP-TV chA11 5kW.

TELEVISION DE LA FRONTERA S.A: **Addr:** Vicente Guerrero 704, Ci Juárez, Chih – **Station:** XEJ-TV chA5 0.5kW.

***TELEVISORA MEXICALI S.A:** **Addr:** P.O. Box 1356, Mexicali, B.C – **L.P:** Dir. Gen: R. Sánchez de Aparichio. Dir. Tec: E. Bezies. **Station:** XHBC-TV chA3 15/7.5kW V – **D.Prgr:** 21.30–06.00.

TELESISTEMA MEXICANO S.A: **Addr:** Edif. Televicentro, Av. Chapultepec 18, México, DF. **Te:** 18-50-20 – **L.P:** Pres: E. Azcárranga Jr. St. Mgr: 1st Netw: E. Azcárraga Jr. Mgr: 2nd Netw: R. O'Farril. Mgr: 3rd Netw: Ing. G. González C. Dir. Tec: M.A. Pereyra. **Stations:** 1) XEW-TV chA2 100kW H (Mexico City). **Relay st's:** XEQ-TV chA9 50kW H (Paso de Cortés) – XEZ-TV chA3 10kW (Cerro del Zamorano) – XEWO-TV chA2 5/2.5kW (Guadalajara) – 2) XH-TV chA4 100kW H (México City). **Rel. st's:** XEX-TV chA7 5kW H (Altzomoni) chA6 10kW H (Cerro del Zamorsno) – 3) XHGC-TV chA5 5kW H (México City) – 4) KWEX-TV chA41 (San Antonio, Texas, USA), KMEX-TV chA32(Los Angeles, Calif) chA65 (New York, NY) **D.Prgr:** 1) Mon–Fri 14.00–20.30, 22.15–06.45, Sat 14.00–20.00, 22.30–05.45, Sun 16.30–06.45 – 2) D 20.30–05.45, Mon–Fri 17.00–17.30, Sat/Sun 15.30–20.00 – 3) D 21.30–05.45, W 17.00–17.30, Sun 17.15–17.45. Test tr. (colour): D 00.00–01.00.

TELEVISION DEL NORTE S.A. **Addr:** P.O. Box 1833, Monterrey, NL. **Te:** 2-62-00 – **L.P:** Pres: A. Garza Lagüera. Gen. Mgr: R. Doubrewill. Dir. Tec: Ing. J. Orozco – **Station:** XET-TV chA6 108/54kW H – **D.Prgr:** W 22.15–04.30.

RADIO TELEVISION S.A: **Addr:** Apt. Postal 121, Tijuana, B.C – **L.P:** Dir. Gen: E. Azgárraga V. Dir. Tec: Ing. A. Frias Ramírez – **Station:** XE-TV chA6 20kW – **D.Prgr:** 15.00–07.00 – **F.Pl:** Color-TV in 1965.

***TELEVICENTRO DE MONTERREY:** **Addr:** Privada Alameda y Espinosa, Monterrey, N.L. **Te:** 2-01-01 – **L.P:** Gen. Mgr: M. Quintanills G. Dir. Tec: R. Rueda – **Stations:** XEFB-TV chA3 15/7.5kW H. XHX-TV chA10 84/42kW H – **F.Pl:** chA10 (Linares, NL).

***TELEVISION DE NUEVO LAREDO:** **Addr:** Aldama 2611, Nuevo Laredo, Tams. **Te:** 2182 – **L.P:** Gen. Mgr: R. Tijerina C – **Station:** XEFE-TV chA2 0.5kW – **D.Prgr:** 00.00–06.00 – **F.PL:** chA11 (for relay of chA3 & chA10 of Monterrey).

TELEVISION TAPATÍA S.A: **Addr:** P.O. Box 5, Guadalajara, Jal. **Te:** 4-82-82. **Telex:** 06-830 – **L.P:** Gen. Mgr: A. Diaz G. Dir. Tec: Ing. C. Sánchez – **Station:** XEHL-TV chA6 6/3kW H – **D.Prgr:** 20.00–06.00.

***TELEVISORA DE LA LAGUNA:** **Addr:** Torreon, Coah. **Station:** XELN-TV chA4 0.5kW.

TELEVISION DE CIUDAD JUAREZ: **Addr:** P.O. Box 271, Ci. Juárez, Chih – **L.P:** Gen. Mgr: S.R. Molinar F – **Station:** XEPM-TV chA2 10kW.

***TELEVISORA DE CHIHUAHUA S.A:** **Addr:** Chihuahua, Chih – **Station:** XERA-TV chA11 0.25kW H.

***TELEVISORA DE HERMOSILLO S.A:** **Addr:** P.O. Box 603, Hermosillo, Son **Te:** 3-66-66 – **L.P:** Gen. Mgr: R. Azcárraga R. Dir. Tec: Ing A. Téllez – **Station:** XEHW-TV chA6 1.12/0.56kW H – **D.Prgr:** 22.00–06.00.

***TELEVISORA DE OCCIDENTE S.A:** **Addr:** Av. Alemania 285, Guadalajara Jal. **Te:** 4-41-40 – **L.P:** Dir. Gen: M. Rincon E. Gen. Mgr: M. de Coso Y. Dir. Tec: R. Venegas – **Stations:** XEWO-TV chA2 5/2.5kW H, XHG-TV chA4 5/2.15kW H – **D.Prgr:** XEWO-TV: As Telesistema Mexicano 1st Netw. XHG-TV: 18.00–07.00.

***TELEVISORA DE CALIMEX S.A:** **Addr:** Tijuana B.C – **Station:** XEWT-TV chA12 5kW.

***TELEVISORA DE NOGALES S.A:** **Addr:** Av. Alvaro Obregón 138, Nogales, Son. **Te:** 562 – **L.P:** Gen. Mgr: Dr. F. Arriola G. Dir. Tec: Ing. C.P. Morreale – **Station:** XHFA-TV chA2 1kW – **D.Prgr:** 00.00–07.00.

TELEVISORA DE YUCATAN: **Addr:** Ca. 60, No. 385, Merida, Yucatan – **L.P:** Dir. Gen: A. Garcia Lavin. Dir. Tec: R. Garcia M – **Station:** XHY-TV chA3 25kW d – **D.Prgr:** 22.00–06.00.

TELEVISION DE COLIMA S.A: **Addr:** Anillo Circunvalación 1080 Nte, Colima, Col – **Station:** XHCC-TV chA5 1kW.

***TELEVISION DE VERACRUZ:** **Addr:** Apt. Postal 751, Veracruz **L.P:** Dir. Gen: C. Ferraez Matos. Dir. Tec: C. Trejo Castillo. Film Buyer: J. Horacio S – **Station:** XHFM-TV chA2 2/1.8kW – **D.Prgr:** 23.00–06.00.

TELEVISION DE ENSENADA: **Addr:** Av. Punta Banda y Eugenia, Fraccionamiento Chapultepec, Ensenada, B.C – **Station:** XAS-TV chA23 0.12kW.

Projected Stations:
TELEVISORA DE YAQUI Ci Obregón, Son – **Station:** chA2 0.4kW.

JESUS D. GONZALEZ: **Addr:** Paricutin 316, Sur, Col Roma, Monterrey N.L – **Station:** XHDG-TV chA12.

TELEVISION MEXICANA INDEPENDIENTE: **Addr:** Av. Insurgentes Sur 1870, Mexico DF – **L.P:** Dir. Gen. Lic: G. Salas G – **Station:** chA13.

ROBERTO NAJERA – **Station:** chA16, Mexico, DF – **D.Prgr:** Color TV to start early 1965.

Ampex Videotape, USA: XERA-TV (TS) (Chihuahua), XEWO-TV (TS) (Guadalajara), XEWH-TV (TS) (Hermosillo), XEJ-TV (Juarez), XEFE-TV (TS) (Laredo), XEM-TV (TS) Mexicali), Corp. Mexicana XEW-TV (TS), XHGG-TV, Telesistema (Mexico City), XHNL-TV (Monterrey), XHGO-TV (TS) (Tampico), XEWT-TV (TS), XETV (Tijuana), XHLN-TV (TS) (Torreon).
Pye T.V.T, GB: Tr, ant, studio equip, OBV to XEIP-TV.

NETHERLANDS ANTILLES

NETHERLANDS ANTILLES TELEVISION & ELECTRONICS CORPO (NATEC) NV.

TELECURACAO (Comm.)
Addr: P.O. Box 415, Curaçao. **Cable:** Telecuracao. **Te:** 13140 – **L.P:** Pres: G. A. Bartell. Gen. Mgr, Prgr. Mgr & Film Buyer: Miss Madeleine de Ryke. Dir. Tec: J. J. C. Cornelissen.
Station: ch E8 2kW H – **D.Prgr:** 21.30–04.00.

TELEARUBA (Comm.)
Addr: P.O. Box 392 1A, Aruba. **Cable:** Telearuba. **Te:** 7302. **L.P:** See Telecuraçao – **Station:** chE12 3kW – **D.Prgr:** 22.00–04.00.
Projected St's: 2 low powered repeaters at Bonaire.

NICARAGUA

TELEVISION DE NICARAGUA, S. A. (Comm.): **Addr:** Apdo 1505, Managua. **Cable:** Tevenic. **Te:** 5404 – **L.P:** Dir. Gen: R. O. Cano. Gen. Mgr: R. A. Silva. Dir. Tec & Sales Mgr: A. Lopez. **Stations:** YNSA-TV: ch A8 0.3/0.15kW V, ch A6/3kW – **D.Prgr:** 17.00–04.30.

PANAMA

CIRCUITO RPC-TELEVISION (Comm.) – **Addr. & L.P:** see radio. **Stations:** HOHM-TV chA4 45/22.5kW – HOH4-TV David chA6 6.3/3.15kW – HOF34-TV Sona chA7 7.95/3.97kW – HOHM-TV chA12 25/12.5kW (rel. chA4) – **D.Prgr:** 16.30–18.15, 21.00–04.30.
Ampex Videotape, USA.

TELEVISORA NACIONAL S.A. (Priv. Comm.) – **Addr:** Apt. 8371, Panama. **Te:** 3-1724. **Cable:** Tenasa – **L.P:** Gen. Mgr: R. Garcia de Paredes C. Dir. Tec: J. Stabile – **Stations:** HOU34-TV chA2 90/45kW – HP5C-TV chA6 0.5/0.25kW* – **D.Prgr:** 17.00–04.30.
*=St. under construction.

VOZ DEL BARU – Addr. & L.P: see radio.
Station: HOU31-TV chA10 3/1.5kW (under construction).

PUERTO RICO

Call	chA	kW	Comm. exc. Dept. of Education
WKAQ-TV	2	100/50	El Mundo Inc, Box 5096, Puerta de Tierra
WIPM-TV	3	35.5/17.8	Dept. of Education, Hato Rey, San Juan
WAPA-TV	4	56.2/33.9	Ponce de Leon Broadc. Co. of P. R, P.O. Box 2050, S. Juan[1]
WORA-TV	5	100/50	Supreme Broadc. Co. Inc. of P.R. Box 43, Mayaguez[2]
WIPR-TV	6	100/50	Dept. of Education, P.O. Box 306, S. Juan
WRIK-TV	7	62/31	Ponce TV Corpo, Darlington Bldg.[3]
WSUR-TV	9	2.7/1.35	American Colonial Broadc. Corpo, Box 4189, San Juan. Tr. in Villalba.[4]
WKBM-TV	11	2.7/1.3	American Colonial Broadc. Corpo, Box 4189, San Juan. Tr. Caguas.[5]
WOLE-TV	12	33.1/16.6	Western Broadc. Corpo, Box 2050, San Juan. Tr. in Pico Atalay, A. Ricon.[5]

Ampex Videotape, USA: WAPA, WIPR, WKAQ, WKBM.

TRINIDAD

TRINIDAD AND TOBAGO TELEVISION CO. LTD. (Comm.) A joint private enterprise between majority joint-chare-holders, Rediff. Ltd. and Scottish Television Ltd, with participation by C.B.S. and Go – **Fi:** By adv – **Fee:** WI $ 20.00.
Addr: Television House, Maravel Rd, Port-of-Spain. **Cable:** Television Trinidad. **Te:** 24141 – **L.P:** Gen. Mgr: R. F. Goodsman. Chief Eng: J. N. Elven. Sales Mgr: N. E. Welch.
Station: (System: Can. Gen. Electric): chA13 15/6kW H. Relay st: chA2 15/7.5kW H.
D.Prgr: W 22.00–02.00(Sat 03.00), Sun 21.00–03.00.

VIRGIN ISLANDS

ISLAND TELERADIOSERVICE. Inc – **Addr:** P.O. Box 1947, St. Thomas – **Station:** WBNB-TV ch A10 2.5/1.25kW.

SOUTH AMERICA

ARGENTINA

All st's comm. (exc. Primera TV Argentina -Go.)
PRIMERA TELEVISORA ARGENTINA: Addr: Av. Alem 735, Buenos Aires. **Te:** 32-7090 – **L.P:** Dir. Petrone. Dir. Tec: F. Licht. Chief Eng: M. Koeble – **Station:** LS82-TV ch A7 40kW – Low power rel. st's in Rosario, Santa Fé, Chivilcoy – **D.Prgr:** 13.00–03.30.

CA–DE–TE: Addr: Av. F. Alcorta 3428 y Castex 3345, Buenos Aires. **Te:** 72-3073 – **L.P:** Dir: A. Romay – **Station:** LS83-TV ch A9 40kW. **D.Prgr:** 14.00–03.00.

TELEONCE: Addr: Dicon S. A. Pavón 2444, Buenos Aires. **Te:** 91-9236. **Cable:** Teleonce – **L.P:** Dir: Gen: Dr. P. Simoncini. Dir. Tec: C. A. Fernandez – **Station:** LV84 ch A11 120/60kW – **D.Prgr:** 20.00–03.00.

RIO DE LA PLATA: Addr: Cochabamba 1153, Buenos Aires. **Te:** 273601. **Cable:** Riteve – **L.P:** Dir. Gen: A.R. Constantini – **Station:** LS85-TV ch A13 115/57.5kW H – **D.Prgr:** 13.30–03.00.

DIFUSORA MARPLATENSE: Addr: Av. Luro 2907, Mar del Plata. **Te:** 23046 – **L.P:** Dir: O. Vinas. Dir. Tec: R. Casanova. **Station:** LU86-TV ch A8 5kW H – **D.Prgr:** 20.00–03.00.

SOCIEDAD DIFUSORA MENDOZA: Addr: Garibaldi 7, Mendoza. **Te:** 19468 – **L.P:** Dir. Gen: S. Castro. Dir. Tec: H. Bartolamedi. **Station:** (System RCA): LV89-TV ch A7 2/1.05kW H – **D.Prgr:** 15.30–03.30.

TELECOR, S.A: Addr: Fader 111, Cerro de las Rosas, Córdoba. **Te:** 87685 – **L.P:** Mgr: J.A. Smith. Dir. Tec: M. Barbieri. **Stations:** LV81 ch A12 2/0.5kW H – **D.Prgr:** 15.00–03.00.

UNIVERSIDAD NACIONAL DE CORDOBA: Addr: Rivera Indarte 170, Córdoba. **Te:** 31986 – **L.P:** Dir. Gen: F. Gacón M. Dir. Tec: H. Blesio.
Station: LV80 ch A10 0.5/0.3kW H – **D.Prgr:** 17.00–24.00.

TELEVISORA MENDOZA: Addr: San Rafael, Mendoza.
Station: LV84 chA6.

TELEVISORA SAN JUAN: Addr: Rivadavia 22 Este, San Juan.
Station: LV82 ch A8.

UNIVERSIDAD DE TUCUMAN: Addr: San Miguel de Tucuman.
Station: LV83 ch A10.

St's under construction: LT80 Concordia chA4 (Rio Uruguay Co. de TV, Luis Saenz Peña 1240, B. Aires) – LW80 chA7 (R. Visión Jujuy S.A. Necochea 237, San Salvador de Jujuy) – Further st's to operate in Bahia Blanca, Mar del Plata, Comodoro Rivadavia, Neuquén Corrientes, Resistencia, Santiago del Estero, Salta, Santa Fé, La Plata. Ampex Videotape USA: LS-3, LS82, LS85.
AKG, Austria: studio equip. (ch7, 9, 11) recorders, microphones.

BRAZIL

ASSOCIAÇÃO BRASILEIRA DE EMISSORAS DE RADIO E TELEVISÃO – **Addr.** & **L.P:** see radio.

TELEVISÃO-RIO: Addr: Av. Atlantica 4264, Rio de Janeiro. **Te:** 27-0047. **Cable:** Teverio – **L.P:** Mgr: J. Baptista do Amaral Jr. Dir. Tec: J. Toropoosky. Dir. Prgr: M. Arêas Campos. Film Buyer: W. C. Bueno. – **Station:** chA13 36/18kW H – **D.Prgr:** Mon–Fri 18.00 (Sat/Sun 15.00)–03.00. **Relay St's: TV-Juiz de Fora, MG** chA5 10/5kW H, **TV-Lafaiete** chA6 10/5kW H, **TV-Guaratingueta** chA12 10/5kW H, **TV-Friburgo** chA3 10/5kW H – **TV-Santos, TV-Valinhos, TV-São José dos Campos.**

TELEVISÃO-TUPI: Addr: Av. João Luiz Alves 14-Urca, Rio de Janeiro – **L.P:** Dir. Gen: Dr. N. G. Bastos. Dir. Tec: Dr. J. P. Bodin – **Station:** chA6 300kW H – **D.Prgr:** 18.30–03.00 (Sun 14.40–03.00). **Relay st's: TV-Mariano Procopio** chA8 10/5kW (Juiz de Fora, MG): 21.00–02.00, **TV-Tupi Difusora** chA4 (Ribeirão Preto, SP): 20.35–22.45 local prgr's, 23.00–03.00, **TV Guapu, TV Itatiaia, TV Itapeva.**

EMISSORA DE TELEVISÃO CONTINENTAL: Addr: Rua das Laranjeiras 291, Rio de Janeiro. **Te:** 42-6419 – **L.P:** Dir. Gen: C. Berardo. St. Mgr: C. B. Carneiro da Cunha. Dir. Tec: J. M. Franciscus Zayen – **Station:** chA9 10kW H – **D.Prgr:** 21.00–04.00.

TELEVISÃO TUPI DIFUSORA: Addr: Biarro Sumare, São Paulo, SP – **L.P:** Dir: Dr. E. Monteiro – **Station:** chA4 5kW – **D. Prgr:** 12.00–03.00.

TELEVISÃO CULTURA: Addr: Rua Sete de Abril 230, São Paulo – **Station:** chA2 300kW – **D.Prgr:** 19.00 (Sun 17.00)–03.00

TELEVISÃO PAULISTA: Addr: São Paulo, SP – **Station:** chA5 30kW – **D.Prgr:** W 18.00–02.00. Sun 14.08–01.40.

TELEVISÃO RECORD: Addr: São Paulo, SP – **L.P:** Dir. Gen: E. A. Amaral Carvalho – **Station:** chA7 36/18kW H – **D.Prgr:** 18.00–03.00.

TELEVISÃO EXCELSIOR: Addr: Rua Nestor Pestana 196, São Paulo. **Te:** 365329; Av. Venezuela 43, Rio de Janeiro. **Te:** 238185; TV-Gaucha: Av. Borges de Medeiros, Porto Alegre – **L.P:** Dir. Gen: W. Simonsen Neto. Mgr: A. Saad. Dir. Tec: A. Maluf. Film Buyer: E. Leite – **Stations:** São Paulo chA9 60kW H, Rio de Janeiro chA2 100kW H, Porto Alegre (TV Gaucha) chA12 40kW H – **D.Prgr:** chA9/A2: W 15.00–05.00, Sun 12.00–05.00; chA12: 19.00 (Sat 15.00, Sun 13.00)–03.00. **Projected:** Belo Horizonte chA7 60kW H to operate by Jan 1st 1965.

TELEVISÃO RIBEIRÃO PRETO: Addr: Ribeirão Preto, SP – **Station:** chA13 1kW – **D.Prgr:** rel. TV-Tupi, São Paulo, exc. 21.00–23.00.

TELEVISÃO BAURU: Addr: Bauru, SP – **Station:** chA2 3kW – Operates in conjunction with TV-Paulista, São Paulo.

TV-BELO HORIZONTE, Belo Horizonte, MG. **Station:** chA12 10/5kW H – **D.Prgr:** 20.00–03.00.

TELEVISÃO ITACOLOMI: Addr: Av. Tocantins 499, Belo Horizonte, MG – **L.P:** St. Mgr: Dr. G. T. da Costa. Dir. Tec: V. P. Netto. Film Buyer: A. Rezende – **Station:** chA4 36/18kW H, chA2 (TV Alterosa) 8/4kW H – **D.Prgr:** 20.00–03.00.

TELEVISÃO PIRATINI: Addr: Rua Vigario José Inacio 371, Porto Alegre, RGS – **Stations:** chA5 25/12.5kW V – **D.Prgr:** 15.00–16.30, 20.00–02.30. **Relay st's:** TV Pelotas, TV Santa Maria, TV Passo Fundo, TV Cachoeira do Sul.

TELEVISÃO JORNAL DO COMERCIO: Addr: Recife – **Station:** chA2 200kW.

TELEVISÃO CLUBE DE PERNAMBUCO: Addr: Av. Cruz Cabuga 394, Recife, PE – **Station:** chA6 25kW.

TELEVISÃO ITAPOAN: Addr: Rua Carlos Gomes 57, Salvador, BA – **Station:** chA5 10/2kW – **D.Prgr:** W 21.00–02.00, Sun 17.25–02.35.

TELEVISÃO BRASILIA: Addr: Av. W-3, Brasilia, DF – **Station:** chA6 10kW – **D.Prgr:** 15.00–17.00, 21.00–03.00.

TELEVISÃO ALVORADA: Addr: Brasilia – **Station:** chA8 10/5 kW H – **D.Prgr:** 21.00–03.00.

TELEVISÃO PARANA: Addr: Rua J. Loureiro 119, Curitiba – **L.P:** Dir: C. Guilherme Addor. Dir. Tec: J. Louro – **Station:** chA6 25 kW – **D.Prgr:** 19.57–02.30.

TELEVISÃO PARANAENSE: Addr: Senador Alencar Guimarães 97, Curitiba, PA – **L.P:** Dir. Gen: Dr. N. Chede. Dir. Tec: O. B. Freire – **Station:** chA12 10/5kW H.

TELEVISÃO CEARA R. CLUBE: Addr: C.P. 222, Fortaleza, CE – **Station:** chA2 3kW – **D.Prgr:** W 20.00–01.00, Sun 18.30–01.00.

TV-MARAJOARA: Addr: Av. Governador J. Malcher 1325, Belém, PA – **Station:** chA2 5kW.

TV RADIO CLUBE: Addr: C.P. 62, Goiânia. **Te:** 4041 – **L.P:** Dir. Gen: F. B. Sobrinho – **Station:** chA4 5/2.5kW.

TV-VITORIA: Addr: Edif. Moyses 114 andar, Vitoria, ES – **Station:** chA4 5kW – **D.Prgr:** 22.00–01.00.

TV BORBOREMA: Addr: Campina Grande, Paraiba. **Station:** chA9.

TV INDUSTRIAL: Addr: Juiz de Fora, MG. Station: chA10.

TV ALTEROSA: Addr: Belo Horizonte, MG. Station: chA2.

TV ANHANGUERA: Addr: Goiânia, Goiás, Station: chA11.

TV COROADOS: Addr: Londrina, Paraná. Station: chA3.

TV ERECHIM: Addr: Erechim, RGS. Station: chA4.

Projected stations:
TV Mayrink Vega, Rio de Janeiro, chA2 – **TV Globo,** Rua Irineu Marinho 35, Rio de Janeiro, chA4 – **TV Nacional,** Brasilia, chA2 – **TV Farroupilha,** Galeria Rosario 22, Porto Alegre, chA5, – **TV Bandeirantes,** São Paulo, chA13 – **TV Gazeta,** São Paulo, chA11 – **TV Brasil Central,** Goiânia, chA13 – **TV Campos,** Campos, chA8 – **TV Guaiba,** Porto Alegre, chA2 – **TV Santos Difusora,** Santos –**TV Volta Redonda,** Volta Redonda, chA8 – **TV Feira de Santana,** chA3.

Ampex Videotape: TV Alvorada (Brasilia), TV Gaucha(Porto Alegre), ch2 (Recife), Rio, TV Cont, TV Rio (Rio de Janeiro), ch7, ch9, ch13, TV Excelsior, TV Paulista (São Paulo).
The Marconi Company, Ltd, G.B: TV tr's: Jornal de Comercio (Recife) 1 × 18, 1 × 9kW, R. Bandeirantes S. A. (São Paulo) 2 × 5, 1 × 5kW– Ant: Jornal de Comercio – Studio equip: Jornal de Comercio, R. Bandeirantes, S.A – OBV: Jornal de Comercio.
Pye T.V.T, GB: Tr, ant, studio equip to TV Gaucha, Porto Alegre.

CHILE

UNIVERSIDAD CATOLICA (Non-comm.) – Addr: Casilla 114D, Santiago. Te: 397709 – L.P: Dir. Gen: E. Tironi Arce. Dir. Tec: P. Carabal - Station: ch A13 10kW H. Repeater st. (ch A8) in Valparaiso. D.Prgr: 22.00–04.00, Mon 01.00–03.30.

UNIVERSIDAD DE CHILE (Educ): Addr: Alameda, 1058 Santiago – L.P: Dir: H. Soto. Dir. Tec: H. Barra.
Station: ch A9 3kW V – D.Prgr: 01.45–03.00.

COLOMBIA

INSTITUTO NACIONAL DE RADIO Y TELEVISION (Go.) Fi: By Go. and adv. (40% of prgr's non-comm.) – Addr: Apt. Nacional 1824, Bogota. Te: 435640 – L.P: Dir. Gen: C. Simmonds. P. Dir. Tec: W. Puth – Stations: Bogota chA10 1/0.25kW/A7 10/2kW – Manizales chA11 1/0.25kW – Las Jurisdicciones chA6 10/2kW – El Carmen chA9 1/0.25kW – Monteria chA7 1/0.25kW – S. Marta chA2 10/2kW – Medellin chA8 0.25kW – Tunja chA10 0.4kW – Madrono chA9 0.4kW – Belencito chA7 5kW.
D.Prgr's: 13.15–16.00(Educational), 21.00–04.30(Comm). Prgr's are originated at Bogota, all other st's are repeaters.
Under Construction: Bogota (2nd Prgr.) chA9 1/0.25kW, Medellin chA3 10/2kW, Cali chA11 10/2kW, Munchique (Popayan) chA7 1/0.25kW, Galeras (Pasto) chA10 1/0.25kW, Neiva chA11 1/0.25kW, Quibdo chA13 & Cucutá chA7 0.25kW.

ECUADOR

LA VENTANA DE LOS ANDES (Priv, non-comm, cult.)
Addr: Casilla 691, Quito – L.P: Dir: R. B. Clark – Station: HCJB-TV chA4 8/3kW H – D.Prgr: D exc. Mon 23.30–03.00

PRIMERA TELEVISORA EDUCATORIANA (Comm): Addr: P.O. Box 3875. Guayaquil – L.P: Mgr: J. Rosenbaum – Station: chA4 2kW H – D.Prgr: 22.30–03.30.

PERU

CULTURAL
MINISTRY OF EDUCATION (Go.): Addr: Ministerio de Educación Pública. Dirección de Cultura, Lima. Te: 75737 - L.P: Dir. Gen: R. Garrido M. Dir. Tec: A. E. Mousalve – Station: OAD-TV chA7 0.1/0.05kW H.

COMMERCIAL
TELEVISORA AMERICA: Addr: Montero Rosas, Lima. Te: 42919 – L.P: Mgr: N. Gonzales V. Dir. Tec: D. Capella – Stations: 1) chA4 6kW, 2) Piura chA2 8kW, 3) Chiclayo chA4 8kW, 4) Trujillo chA4 8kW – Relay st's: 1) Huacho ch6, Ica ch6, Ancon ch6, 2) Talara ch6.

TELEVISORA PANAMERICANA: Addr: Av. Arequipa 1110, Lima. Te: 34240 – L.P: Mgr: G. Delgado P. Dir. Tec: M. Flores – Stations: 1) chA13 2/4kW, 2) Trujillo ch7 0.58kW, 3) Piura chA7 0.58kW, 4) Chimbote chA9 0.3/0.75kW, 5) Chiclayo chA9.

TELEVISORA VICTORIA: Addr: Av. Tacna 543, Lima. Te: 3-5945 – L.P: Mgr: J. E. Cavero – Stations: 1) chA2 30kW, 2) Huancayo chA3, 3) chA6 (Iquitos), 4) Cuzco chA6.

TELEVISORA EXELSIOR: Addr: Av. Manco Capac, Lima – L.P: Mgr: A. Belmont – Station: chA11.

TELEVISORA EL SOL: Addr: Av. Uruguay 355, Lima. Te 35490 – L.P: Dir. Gen: A. Pereyra. Gen. Mgr: N. Gonzalez V – Station: chA9 5/10kW. Relay st's: Huacho chA7, Ica chA11 – D.Prgr: 23.30(Sun 23.00)–05.00.

TELEVISORA SUR-PERUANA: Addr: Cas. 514, Arequipa. Te: 3090 – L.P: Mgr: G. Quintanilla. Dir. Tec: E. Tchuschke – Stations: 1) chA2 0.25/0.5kW, Cuzco chA4 – D.Prgr: 18.00–04.30 – Planned st's: Piura chA7, Tacna chA2, Trujillo chA7.

TELEVISORA CONTINENTAL: Addr: M. de Orberoga 338, Arequipa – Station: chA6 8kW – D.Prgr: 20.00–05.00.

Ampex Videotape, USA: R. America TV, Lima.

URUGUAY

SAETA (Sociedad Anomina de Emisoras de Television y Anexos) (Comm.) – Addr: Tacuarembo 1234, Montevideo. Cable: Saeta. Te: 4-4034 – L.P: Pres: R. Fontaina. Vice Pres: J. E. De Feo. Gen. Mgr: R. Fontaina Jr. Dir. Tec: A. Galimberti. Sales Mgr: M. Fontaina. Film Buyer: E. Antonio – Station: chA10 2.5kW H – D.Prgr: 17.00–03.00.

SODRE (Servicio Oficial de Difusión Radio Electrica): Addr: Bulevard Artigas, Colorado, Montevideo – L.P: See radio – Station: chA5 5/2.5kW – D.Prgr: 21.30–03.00 – Projected St's: chA6 32.5kW, chA12 100kW.

TELEVISORA LARRANAGA S.A. (Comm.): Addr: Enriqueta Compte y Rique 1276, Montevideo. Te: 25856 – L.P: Gen. Mgr: H. Scheck – Station: CXA12-TV chA12 40/20kW – D.Prgr: 12.00–03.00.

MONTE CARLO TV (Comm.): Addr: Av. 18 de Julio 1855, Montevideo. Cable: Montecarlotv. Te: 402146 – L.P: Dir. Gen: H. Romay Salvo. Dir. Tec: J. L. Goyret. Dir. Prgr: J. N. Mullins – Station: chA4 24/12kW H – D.Prgr: 11.00–04.00 – F.Pl: 100kW.

VENEZUELA

Def: 625 – Ch: A – Pol: H.

TELEVISORA NACIONAL (Go.) – Addr: Apt. 3979, Caracas. Te: 545436 – L.P: Dir. TV: Dr. A. Pazani P. Dir. Tec: M. A. Burgos. Station: YVKA-TV chA5 37.5/18.6kW – D.Prgr: 21.30–04.30.

VENEVISION S.A. (Comm.) – Addr: Apt. 6674, Caracas. Te: 722741 – L.P: Dir. Tec: M. Sapkowski – Station: Carabobo chA9 84/42kW – D.Prgr: 22.30–04.30.

R. CARACAS TV (Comm.) – Addr: Apt. 2057, Caracas. Te: 418971 – L.P: Dir. Gen: A. Espina. Dir. Tec: J. Marcano – Stations: YVKS-TV: Barquisimeto chA3 20/10kW, Carabobo chA7 12.8/6.4kW, Caracas chA2 62.6/31.3kW, Curimagua chA10 330/165kW, Coro chA10 330/165kW, Valencia-Maracay chA7 13/6.5kW, La Guaira chA7 10/5kW, Maracaibo chA2 600/300kW, Barquisimeto chA2 – D.Prgr: 12.30–05.00.

ONDAS DEL LAGO TELEVISION (Comm. – Addr: Apt. 261, Maracaibo – Station: chA13 12/6kW.

R. VALENCIA TV (Comm.) – Addr: Valencia – Station: chA3 4/2kW – D.Prgr: 22.30–04.30.

TELEINVERSIONES C.A. – Addr: Apt. de Correos 9349, Caracas. L.P: Techn. Dir: M. Sapowski. Maintenance Eng: J. Cervera – Stations: Valencia chA6 3/1kW, Pichacho chA13 50/10kW, Caracas chA13 50/10kW. Prgr's are originated in Valencia where studios are located, and repeated in Pichacho & Caracas.

COLOR TELEVISION, Caracas – Station: YVRS-TV chA8.

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Sovereign Film Dist. Ltd., 3811 Edmonton Trail, Calgary, Alberta
1200 St. Alexander Street, Montreal, Quebec
133 Princess Street, Saint John, N.B.
2178 W. 12th Street, Vancouver, B.C.
281 Colony Street, Winnipeg, Manitoba

Ideal Pictures Inc., 417 North State Street, Chicago, Illinois
Branch: 6514 Selma Avenue, Hollywood, California
Independent Television Corp., 555 Madison Avenue, New York, New York
Branches: 100 University Avenue, Toronto, Canada
17 Great Cumberland Place, London W.1, England
Intertel, International Television Development Corp., 527 Madison Avenue, New York, New York

Jayark Films Corp., 733 Third Avenue, New York 17, New York

King Features Syndicate TV Division, 235 East 45th Street, New York 17, New York
Branch: 10850 Riverside Drive, North Hollywood, California

Lakeside Television Co. Inc., 1465 Broadway, New York 36, New York
Laurel Films Ltd., 165 Bloor Street East, Toronto, Canada

MCA TV Ltd., 598 Madison Avenue, New York 22, New York
MCA TV, Ltd. Film Syndication Div., 598 Madison Avenue, New York 22, New York

Branches: Revue Studios, 3900 Lankershim Blvd, Universal City California
139 Piccadilly, London W.1, England
49 Bis Avenue Hoche, Paris 8me, France
180 University Avenue, Toronto 1, Ontario, Canada
11 Via Tevere, Rome, Italy
Haendelstrasse 7, 8 Munich 27, Germany
Hamburgo 70, Mexico 6, D.F., Mexico
Hotel New Japan, Suite 881, 29 Nagaiacho 2 chome Chiyo-da-ku, Tokyo, Japan
Universal House, Poplar & Pelican Streets, Sydney, Australia
1434 West Street, Catherine Street, Montreal 25, Canada

Malibu Productions Pty. Ltd., 313 Bridge Road, Richmond, Victoria, Australia

Medallion Pictures Corp., 200 West 57th Street, New York 19, New York

Medallion TV Enterprises Inc., 6000 Sunset Blvd., Hollywood 28, California

Branch: 444 Madison Avenue, New York, New York

MGM-TV, 1540 Broadway, New York, New York

Branches: MGM Studios, Culver City, California
340 Victoria Street, Toronto, Canada

Modern Sound Pictures Inc., 1410 Howard Street. Omaha 2, Nebraska

NBC International, 30 Rockefeller Plaza, New York 20, New York

Branches: NBC International (Great Britain) Ltd., 36 Berkeley Square, London W.1., England
NBC International (Canada) Ltd., 500 University Avenue, Toronto 2, Ontario, Canada
NBC Internacional, De Mexico, S.A., Niza 6, – 505, Postal 21313, Mexico City, Mexico
NBC International Australia Pty. Ltd., 251 Elizabeth Street, Sydney, NSW, Australia

NBC Television Network, RCA Bldg., Radio City, New York 20, New York

Branch: Sunset Blvd. & Vine Street, Hollywood, California

Wynn Nathan Sales Inc., 300 East 51st Street, New York, New York 10022

National Film Board, 3255 Cote de Liesse Road, Montreal, Canada

National Film Board of Canada, 680 Fifth Avenue, Suite 819, New York 19, New York

NTA, 8530 Wilshire Blvd., Beverly Hills, California

Branches: 444 Madison Avenue, New York, New York
175 Bloor Street East, Toronto 5, Ontario, Canada
Eagle House, 109 Jermyn Street, London S.W.1, England
Weteringschans 245, Amsterdam, Holland
Montevideo 451, Buenos Aires, Argentina
900 Mahachai Road, Bangkok, Thailand
37 Rue Kanafani & Ariss, Beirut, Lebanon
Tsukiji Kaikan, 4-4 Tsukiji Chuo-ku, Tokyo, Japan
N. 4 Penang Road, Singapore

Official Films, Inc., 724 Fifth Avenue, New York, New York

Prime TV Films, Inc., 120 West 57th Street, New York 19, New York

Princeton Film Center Inc., P.O. Box 431, Mt. Lucas Rd., Princeton, New Jersey

Branch: 1456 N. Bronson Avenue, Hollywood, California

RCA Recorded Program Services, 155 East 24th Street, New York 10, New York

Branch: 6363 Sunset Blvd., Hollywood 28, California

Walter Reade-Sterling Inc., 241 East 34th Street, New York, New York

Stuart Reynolds Productions, 195 S. Beverly Drive, Beverly Hills, California

Riviera Productions, 6610 Selma Avenue, Hollywood 28, California

Peter M. Robeck & Co. Inc., 230 Park Avenue, New York 17, New York

Branch: 6269 Selma, Hollywood 28, California

Walter Schwimmer, Inc., 410 North Michigan, Chicago, Illinois

Branch: 527 Madison Avenue, Room 514, New York, New York

Scottish Television Ltd., Theatre Royal, Glasgow, Scotland

Screen Gems, Inc., 711 Fifth Avenue, New York 22, New York

Branches: 102–108 Peter Street, Toronto, Ontario, Canada
142–150 Wardour Street, London W.1, England
43–104 Plaza de la Republica, Mexico 1, D.F., Mexico
Columbia Pictures of Brazil Inc., Rua do Triunfo 134–150 Andar, Sao Paulo, Brazil
M.L.C. Building, 105–153 Millet Street, N. Sydney, N.S.W., Australia
Screen Gems Trading Corp. of Puerto Rico, P.O. Box 422 Parada 8, Film Center Bldg., San Juan, Puerto Rico
Japanese International Ent Kanesaka Bldg., 15, 2-chome, Shiba Tamura-cho Minato-ku, Tokyo, Japan
Screen Gems Inc., Kaiserstrasse 6, Frankfurt-Am-Main, Germany

Seven Arts Associated Corp., 200 Park Avenue, New York 17 New York

Branches: 3562 Royal Wood Drive, Sherman Oaks, California
11 Adelaide Street West, Toronto, Ontario, Canada
Seven Arts House, 24 Berkeley Square, London W.1, England

Show Corp. of America, International Bldg., 45 Rockefeller Plaza, New York 20, New York

Southern Television Ltd., Glen House, Stage Place, London S.W.1, England

Sovereign Films Ltd., 277 Victoria Street, Toronto, Canada

Sportlight Films, 20 North Wacker Drive, Chicago 6, Illinois

Sterling Films Ltd., King Edward Hotel, Toronto, Canada

Storer Programs Inc., 500 Park Avenue, New York, New York

Branch: 338 S. Western Avenue, Los Angeles 5, California

T.W.W. Ltd., 207 Sloane Street, London S.W.1, England

Teledynamics Corporation, 729 Seventh Avenue, New York 19, New York

Tele Features Inc., 516 Fifth Avenue, New York 36, New York

Telesynd, Division of Wrather Corp., 375 Park Avenue, New York New York

Time-Life Broadcast, Inc., Time & Life Building, New York, New York

Trans-Lux TV Corp., 625 Madison Avenue, New York 22, New York

Branches: 6258 Hollywood Blvd., Hollywood 28, California
Utoquai 29, Zurich 8, Switzerland

TV Marketeers, Inc., 300 East 51st Street, New York 22, New York

T-V Visuals, Inc., 20 North Wacker Drive, Chicago 6, Illinois

Twentieth Century-Fox TV Inc., 444 West 56th Street, New York 19, New York

Branches: Box 900, Beverly Hills, California

20th Century-Fox TV International, 444 West 56th Street, New York 19, New York

Branches: 110 Bond Street, Toronto 2, Canada
33 Champs Elysees, Paris 8e, France
Box 1790 Moadie Bldg., Monot Street, Beirut, Lebanon
31–30 Shoho Square, London W.1, England
Karolinenplatz No. 6, Munich, Germany
Box 373, Mexico 1, D.F., Mexico
Box 600, Cairo, Egypt
Box 531, Tokyo Central, Japan
43–51 Brisbane Street, Sydney, Australia

Tyne Tees Television Ltd., 1 Great Cumberland Place, London W.1, England

Ulster Television Ltd., 1 Hanover Square, London W.1, England

UN Television, United Nations, New York

United Artists Associates. Inc., 555 Madison Avenue, New York, New York

Branch: 1041 N. Formosa Avenue, Hollywood 46, California

United Artists Television Inc., 555 Madison Avenue, New York, New York

Branches: 9465 Wilshire, Beverly Hills, California
277 Victoria Street, Toronto 2, Ontario, Canada

United Press International, 220 East 42nd Street, New York, New York

Branches: 6520 Selma Avenue, Los Angeles 28, California
575 University Street, Montreal, Quebec, Canada
8 Bouverie Street, London E.C. 4, England
New Mainichi Bldg., Tokyo, Japan
Avenida Belgrano 271, Buenos Aires, Argentina

Van Coevering Productions, 20 North Wacker Drive, Chicago, Illinois

Wales Television Ltd., 1 Great Cumberland Place, London W.1, England

Warner Bros. Television Division, 666 Fifth Avenue, New York, 19 New York

Westward Television Ltd., 4–7 Woodstock Street, London W.1, England

Winik Films Corporation, 1501 Broadway, New York 36, New York

WBC Program Sales Inc., 122 East 42nd Street, New York 17, New York

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A New and Exciting Television Project

Continued from page 56

to be disappointing once the team-leader looked at it on the spot.

Despite the thoroughness of the research that had gone into the dossiers, each team-leader was given the widest discretion on story development, and the crews were chosen on their ability to relate to people. No scripts, no treatments, were drawn up in advance. No stage directions to be used, for the essence of the filming consisted in bringing back a faithful record of life as it was being lived by the subjects of the film. So an extra heavy burden was thrown upon the U.N. film and sound reporters. They had to recognize an interesting or significant scene when they saw it, and they had to be ready to work as an integrated unit to get it recorded at the instant it happened.

Each team, therefore, was given a thorough indoctrination about the new and sophisticated electronic equipment they were to work with. As portable and transistorized as the rigs were, each team had to carry some 240 kilos (over 500 pounds) of equipment. They exposed a quarter of a million feet of 16 mm film. This averaged a ratio of 20 feet shot for every foot finally used in the thirteen half-hour programmes.

The film crews covered about 65,000 miles. (African crew, 22,000, Latin American crew 13,000, Asian crew 29,000). The job could not have been done otherwise, with real stories to be got from such distant places as Ubol, in Thailand, Tsaramody in Madagascar, and Salvador in Brazil.

In Africa, Lauzun's film team made the trip from Bamako to Timbuktu by plane, jeep and riverboat. The Latin American crew, headed by Movshon, found itself working at altitudes up to 15,000 feet in Colombia and Peru, were forced to regiment their labor into short periods rather than risk physical breakdown in the unaccustomed rarified air.

In Thailand and India, Hollander's crew had no choice but to live and eat exactly as the people of the area do, because they were far from those places ordinarily visited by Western travellers.

All the crews managed to enjoy these experiences and would not have foregone them had they been able to choose differently. Some things they might have changed, had they been warned. The African team, eager to document all the aspects of local life in Madagascar, subjected themselves to witnessing a ceremony wherein a young bull was sacrificed; they filmed the entire scene, little of which remains in the finished programme — out of respect to sensitive television viewers.

One of the Latin American crew members, Ron Fleher, broke several small bones in his foot, stumbling through the rocky paths of a Colombian town; another — cameraman David Myers — escaped serious injury when his shoulder-borne camera rig took the brunt of a hard fall in the mountain of Peru.

The Asian crew faced some tense moments when fierce Moroccan tribesmen took exception to the cameraman's innocent mistake of attempting to photograph their women.

But most of the crews' assignments were memorable because of the friendliness of the people they encountered. On their last day in Kumariawas, the U.N. filmmakers were covered with layers of flowers by the villagers. In Colombia, the team was tendered a huge party by the men of the town of Mongui.

I believe that readers of this Handbook the world over will be interested in the thirteen programmes of *International Zone: 1964*. The language recorded by the teams in all cases is the language spoken locally by the subjects, and a wide variety of language, indeed! There is English, French, Spanish, Portuguese, to be sure; but also Hindi, Thai, Lao, Singhalese, from Asia, and Malgache, Yoruba, Hausa, Fante, Ibo, and others, from Africa. So production in all languages will be equally possible, and I look forward to seeing the *International Zone: 1964* series on the television stations of many countries beyond the usual English-speaking region.

LAST MINUTE INFORMATION

Continued from page 246

tofagasta, Prat 465, Antofagasta; CB157 R. Transandina, Galeria Comercial, Los Andes; CC159 R. Rengo, Edif. Municipal, Rengo.

DOMINICAN REPUBLIC: 11) HIAS moved to 3345kc – 25) HIAA using 3315kc 0.5kW – 2) HIDB 4890kc 0.25kW – 41) HIRL using 3365kc 0.5kW – 29) HIAF 3245kc 0.5kW.

GERMANY: Deutsche Welle: Tentative schedule March/April 65: **Stations:** Add 5960, 6120, 7175, 7220, 11775, 11885, 15105, 17830kc – **German Prgr:** 12.50–15.50 (III) 11965/15275kc, 16.00–19.00 (IV) 9640/11795kc – **Foreign Language Prgr: English:** 01.35–02.15 (VII) 6120/9640kc, 04.55–05.35 (IX) 5960/6145/9575/9735kc, 06.05–06.35 (V) 11785/15275/17845kc, 07.30–08.40 (III) 11785/15275/17845kc, 08.45–09.40 (I) 9640/11925/15275kc, 15.10–15.50 (IX) 9735/11795/11885kc, 15.50–16.20 (III) 9545/11775kc, 16.15–17.10 (V) 11890/15275/17845kc, 20.20–20.50 (V) 9575/11785kc, 21.10–22.00 (I) 5980/7175kc – **French:** 02.15–02.55 (VII) 6120/9640kc, 06.50–07.25 (V) 11785/15275/17845kc, 20.50–21.50 (V) 9575/11785kc.

GREECE: Athens (FBS): Dir. Gen: N. Sotirov. Delete: J. Kaloregatos.

INDIA: All India Radio: External Sce's: English: 00.30–00.40 (to So. Ea. Asia) on 6150/7225/9765kc, 10.00–11.00 (to No. Ea. Asia) on 9655/11770/15105/17855kc, 18.40–18.50 (to Ea. Africa, Mauritius) on 7180/9680/11815/11940kc – Add: **N in English:** 14.45 (So. Ea. Asia), 18.41 (Ea. Africa).

KOREA (Peoples Dem Rep): Korean Central Broadcasting Committee, Pyongyang: Home Sce in Korean: **1st Prgr:** 20.00–15.00 on 605/725/785/2850kc, 23.00–08.00 on 6600kc; **2nd Prgr:** 20.00–17.00 on 625/655/685/735/800/820/1080/6250kc; 20.00–23.00, 08.00–17.00 on 3320kc – **Foreign Sce: Chinese:** 12.00–13.00 on 7580/9750kc. **English:** 18.00–20.00 on 6540/7580kc (a), 03.00–04.00 on 9750/14520kc (b), 10.00–12.00 on 7580/9750kc (c). **French:** 20.00–21.00 on 6540/7580 kc (a), 06.00–07.00 on 14520/18200kc (c). **Japanese:** 21.00–22.00 on 635/5044/6540kc, 04.00–06.00 on 635/6540/7580kc, 10.00–13.00 on 635kc, 13.00–15.00 on 635/5044/6540kc. **Korean:** 21.00–21.30 on 800/1080/3320/6520kc, 11.30–12.00 (d) on 785/2850kc, 22.00–23.00 on 6540/7580kc (a), 02.00–03.00 on 14520/18200kc (b), 07.00–08.00 on 14520/18200kc (c). **Russian:** 16.00–18.00 on 6540/7580kc (to Europe), 08.00–10.00 on 5044/6540kc (to Eastern USSR).

MOZAMBIQUE: Radio Pax: I) W 03.55–05.30, Sun 04.55–05.30. II) W 09.25–11.30 Sat 12.00), Sun 05.30–12.00. III) W 16.30–18.00, Sun 13.00–18.00. IV) D 18.00–21.00. V) Native Dialects (Maxangane/Xissena) W 15.25–16.30, Sun 12.00–13.00.
On 1295 (1)/5025 (0.5)kc + FM 90Mc (0.05kW): all tr's. On 3960 (0.35kW)/7205kc (5kW): I+II+III+V; On 3960kc (5kW): IV.

NETHERLANDS ANTILLES: Trans World Radio: Shortwave schedule: (I = to So. America; II = to No. America). W: 09.30–10.30 Spanish 31m (I), 10.30–12.35 English (II), 22.00–22.15 Dutch (Fri only) 19m (I), 22.15–23.00 Spanish 19m (I), 23.00–23.30 Portugese 19m (I), 23.00–23.15 German (Thurs only) 19m (I), 01.30–02.00 Spanish 19m (I), 02.00–04.30 English 49 or 31m (II). **Sun:** 09.30–10.30 Spanish 31m (I), 10.30–18.30 English 31m (II), 22.00–23.00 Spanish 19m (I), 23.00–23.30 Portuguese 19m (I), 01.30–02.00 Spanish 19m (I), 02.00–04.30 English 49 or 31m (II).
D: 23.30–01.30 19m (i): 23.30 Russian, 00.00 German, 00.30 Portuguese, 01.00 Spanish.

NEW ZEALAND: R. New Zealand: To Pacific 17.00–19.45 on 9540/11780kc, 20.00–05.45 on 15280kc, 06.00–08.45 on 9540/11780kc (Sun 08.00–08.45 on 11780kc only). To Australia: 20.00–22.30 on 11780kc, 22.45–05.45 on 15110kc, 09.00–11.45 on 9540/11870kc.

TIME SIGNAL STATIONS: Station VNG, Radio Section, Postmaster-General's Dept, 2–10 Jolimont Terrace, Melbourne C2, Vic. Australia. **Stations:** 5425kc (0.25kW)/7515kc (10kW): 12.00–22.00; 7515kc (0.25kW)/12.005kc (10kW): 22.00–12.00. Short bursts of 1000 c/s tone are transmitted each second exc. for the 59th second of each min.

TELEVISION: The Ethiopian Television Sce. (Go), City Hall, Addis Ababa – **Station:** ch E9 25kW – **D. Prgr:** Sat 14.00–15.00, D.17.00–19.15.

LONG- AND MEDIUM WAVE STATIONS

EUROPE — NORTH AFRICA — NEAR EAST

For medium waves of the other countries see the individual countries.

Alg. = Algeria; Az. = Azores; Aust. = Austria; Belg. = Belgium; Bulg. = Bulgaria; C. Isl. = Canary Islands; Cyp. = Cyprus; Czecho. = Czechoslovakia; Den. = Denmark; F. = France; Faeroe. = Faeroe Islands; Finl. = Finland; G. = Germany; Gr. = Greece; Gt. Br. = Great Britain; Holl. = Holland; Hung. = Hungary; Icel. = Iceland; It. = Italy; Mon. = Monaco; Mor. = Morocco; No. = Norway; Port. = Portugal; Rum. = Rumania; REM = Red de Emisoras del Movimiento; Sp. = Spain; Sw. = Sweden; Switz. = Switzerland.

kc/s	Metres	kW	Stations
151	1987	50	**Moscow I** - USSR
—	1987	50	**Mainflingen** (Deutschl.funk)
155	1935	10	**Tromsø** - Norway
	1935	150	**Brasov** - Rumania
164	1829	250/500	**Allouis** - France
173	1734	500	**Moscow I** - USSR
182	1648	10	**Luleå** - Sweden
—	1648	400/1000	**R. Europe I** - G.
—	1648	240	**R. Ankara** - Turkey
185	1622	200/1000	**Deutschlands.** - G.
191	1571	600	**Motala** - Sweden
200	1500	100	**Moscow II** - USSR
—	1500	400	**Droitwich** - Gt. Br.
209	1435	150	**Kiev I** - USSR
—	1435	100	**Reykjavik** - Icel.
218	1376	200	**Oslo** - Norway
227	1322	500	**Warsaw I** - Poland
233	1287	500	**Luxembourg I**
236	1271	100	**Leningrad I** - USSR
245	1224	150	**Kalundborg I** - Den.
254	1184	200	**Lahti** - Finland
263	1141	150	**Moscow II** - USSR
—	1141	20/150	**R. Wolga** - DDR
272	1102.9	200	**CS I** - Czechoslov.
281	1068	100	**Minsk** - USSR
385	779	50	**Moscow II** - USSR
395	759.5	50	**Moscow IV** - USSR
400	750	50	**Minsk** - USSR
433	693	10	**Oulu** - Finland
520	577	2	**Braunschweig** - **(NDR)** - G.
—	577	1	**Joensuu** - Finland
—	577	—	**4 low power (BR)**,G.
—	577	0.05	**2 low power** - Aust.
—	577	10	**Aldrans II** - Austria
—	577	10	**Lienz II** - Austria
—	577	0.25	**Rørås** - Norway
529	561.1	20	**Schwerin (DDR)**, G.
—	561.1	150	**Beromünster** - Swit.
539	556.5	135	**R. Kossuth** - Hung.
—	556.5	0.05	**Bayonne II** - F.
540	556	0.005	**3 low power** - Italy
548	547.4	100	**Odessa** - USSR
—	547	200	**Königslutter (D.funk)** - G.
—	547	20	**Bechar** - Algeria
557	539	100	**Helsinki I** - Finland
—	538.6	50	**Cairo III** - Egypt
—	538.6	4	**Bukaresti** - Rum.
—	538.6	50	**M. Ceneri** - Switz.
—	538.6	5	**Greifswald (DDR)**
—	538.6	1	**2 low power** - Port.
—	539	1	**Touggoourt** - Alger.
566	530	100	**Athlone** - Ireland
—	530	10	**Caltanisetta I** - It.
—	530	20	**Freies Berlin** - G.
—	530	0.1/0.05	**7 low power** - Aust.
—	530	5	**Oviedo (RNE)** - Sp.
—	530	300	**Damascus** - Syria
575	521.7	300	**Mühlacker (SDR)**G.
—	521.7	100	**Riga I** - USSR
—	521.7	4	**Laghourt** - Algeria
—	521.7	100	**Leipzig (DDR)** - G.
—	521.7	50/10	**Tel Aviv** - Israel
584	514	1	**Paris III** - France
—	513.7	5	**Torshavn** - Faroe
—	513.7	200	**Madrid (RNE)** - Sp.
—	513.7	10	**Klagenfurt II**, Aust.
—	513.7	0.05	**Sfax I** - Tunisia
—	513.7	10	**Salzburg II** - Aust.
—	513.7	150	**Wien II** - Austria.
—	513.7	0.05	**Mayerhofen** - Aust.
593	505.9	150	**Sundsvall** - Sweden
—	505.9	100	**Frankfurt (HR)**, G.
—	505.9	20	**Meissner (HR)**, G.
—	505.9	200	**Sofia II** - Bulgaria
—	505.9	100	**Oujda I** - Morocco
602	498.4	20	**Karl-Marx-St.** - G.
—	498.4	50	**Cairo VI** - Egypt
—	498.4	5	**Sfax II** - Tunisia
—	498.4	100	**Lyon I** - France
606	495	20	**Nicosia** - Cyprus
611	491	10	**Nürnberg-Gr.wöhr** Germany
—	491	10	**Kaiserslaut.** - G.
—	491	140	**Sebaa-Aioun** - Mor.
—	491	1	**Hoefn** - Iceland
—	491	300	**Berlin (DDR)** - G.
—	491	100	**Petrozavodsk**, USSR
—	491	100	**Sarajevo** - Yugosl.
620	483.9	450	**Batra I** - Egypt
—	483.9	150	**Bruxelles I** - Belg.
—	483.9	100	**Sta. Cruz de Tenerife (RNE)**, C. Isl.
628	477	30	**Timisoara II** - Rum.
629	477	100	**Vigra I** - Norway
—	477	300	**Tunis I** - Tunisia
—	477	25	**Aldrans I** - Austria
—	477	25	**Lauterach** - Aust.
—	477	1	**Lienz I** - Austria
—	477	20	**Erfurt (DDR)** - G.
630	476	0.25	**AFRTS** - Iran
638	470.5	100	**BBC** - Cyprus
—	470.5	20	**San Sebastian (RNE)** - Sp.
—	470.5	150	**Praha** - Czechoslov.
647	463.6	100	**Simferopol** - USSR
—	463.6	0.05	**8 low power** - Aust.
—	463.6	150	**Daventry** - Gt. Br.
—	463.6	2	**4 low power** - Gt. Br.
650	461.5	7.5	**R. Tabriz** - Iran
656	457.3	20	**Bolzano I** - Italy
—	457.3	80	**Firenze I** - Italy
—	457.3	80	**Napoli I** - Italy
—	457.3	35	**Torino I** - Italy
—	457.3	10	**Venezia I** - Italy
—	457.3	20	**Berlin (DDR)** - G.
—	457.3	150	**Murmansk** - USSR
—	457.3	100	**Tel Aviv** - Israel
665	451.2	15	**Athens III** - Greece
—	451.2	5	**Eidar** - Iceland
—	451.2	50	**Damascus** - Syria
—	451	20	**Bodenseesender**, G.
—	451	20	**Ravensburg (SWF)**
—	451	10	**Reutlingen (SWF)**
—	451	135	**Lisboa I** - Portugal
—	451	100	**Vilnius I** - USSR
674	445.1	10	**Bodö** - Norway
—	445.1	100	**Tjernovtsy** - USSR
—	445	150	**Marseille I** - France
677	443	20	**Jerusalem** - Jordan
680	441.2	1	**R. Rasht** - Iran
683	439	150	**Beograd** - Yugosl.
—	439	40/100	**Berlin/Hof (RIAS)**
—	439	250	**Sevilla (RNE)** - Sp.
692	434	1	**Bouira** - Algeria
—	434	20	**Nicosia** - Cyprus
—	434	200	**Deutschlands.** - G.
—	434	2	**Cromer** - Gt. Br.
—	434	150	**Moors. Edge**, Gt.Bt.
—	434	2	**Whitehaven** - Gt.Br.
701	427.8	2	**Aurich (NDR)** - G.
—	427.8	2	**Lingen (NDR)** - G.
—	428	5	**Aachen (WDR)** - G.
—	428	2	**Siegen (WDR)** - G.
—	428	2	**Herford (WDR)** - G.
—	428	150	**Istanbul** - Turkey
—	428	140	**Sebaa-Aioun II**, Morocco
—	428	20	**Finnmark** - Norway
—	428	100	**Bratislava** - Czecho.
710	422	150	**Rennes I** - France
—	422	150	**Limoges I** - France
—	422	150	**Donetsk** - USSR
—	422	100	**Cairo II** - Egypt
—	422	150	**Tallinn** - USSR
—	422	1	**Jerusalem** - Israel
719	417.2	135	**R. Free Europe** - G.
—	417.2	100	**BBC** - Cyprus
—	417.2	25	**Norte I** - Portugal
—	417.2	150	**Östersund** - Sweden
—	417.2	2	**Damascus** - Syria
728	412.1	25	**Klagenfurt I** - Aust.
—	412.1	150	**Athens I** - Greece
—	412.1	220	**Deutschlands.** - G.
—	412.1	100	**La Coruña (RNE)**
737	407.1	40	**Hof (RIAS)** - G.
—	407.1	100/200	**Tel Aviv** - Israel
—	407.1	5	**Akureyri** - Iceland
—	407.1	300	**Poznan** - Poland
—	407.1	250	**Barcelona (RNE)**
746	402	20	**Aleppo** - Syria
—	402	30	**Plovdiv** - Bulgaria
—	402	—	**Cottbus (DDR)** - G.
—	402	120	**Hilversum I** - Holl.
—	402	1	**Tlemcen** - Algeria
755	397.3	20	**Kuopio** - Finland
—	397.3	130	**Timisoara I** - Rum.
—	397.3	135	**Lisboa II** - Portugal
—	397.3	20	**Ravensburg (D.funk)** - G.
764	392.6	150	**Sottens** - Switzerl.
—	392.6	150/300	**Baghdad** - Iraq
—	392.6	10	**Odessa** - USSR
773	388.1	150	**Stockholm** - Sweden
—	388.1	2	**Malmberget** - Sw.
—	388.1	25	**Valencia (RNE)**, Sp.
—	388.1	30	**Stolnik** - Bulgaria
—	388.1	500	**Cairo I** - Egypt
—	388.1	1	**Salzburg I** - Aust.
—	388.1	0.1/0.05	**8 low power** - Aust.
777	387	100	**Zahedan** - Iran
782	383.6	250	**Deutschlands.** - G.
—	383.6	100	**R. Clube Portuguese**
—	383.6	100	**Kiev II** - USSR
—	383.6	2	**Vatican Radio**
786	381	10	**Damascus** - Syria
791	379.2	50	**Thessaloniki I** - Gr.
800	375	100	**München (BR)** - G.
—	375	100	**Leningrad II**, USSR
—	375	5	**R. Sevilla** - Spain
—	375	100	**Amman** - Jordan
809	370.8	100	**Burghead** - Gt. Br.
—	370.8	5	**Redmoss** - Gt. Br.
—	370.8	2	**Dumfries** - Gt. Br.
—	370.8	100	**Westerglen** - Gt. Br.
—	370.8	135	**Skopje** - Yugosl.
—	370.8	20	**R. Madrid** - Spain
818	366.7	10	**Trieste I** - Italy
—	366.7	450	**Batra II** - Egypt
—	366.7	300	**Warszawa II** - Pol.
—	366.7	1	**Casablanca I** - Mor.
—	366.7	300	**Vallées-Andorre**
827	363	100	**Sofia I** - Bulgaria
—	363	1	**Rabat I** - Morocco
—	363	1	**Oujda** - Morocco
—	363	40	**Freiburg (SWF)**, G.
—	363	0.5/1.5	**3 low p. (SWF)**, G.
—	363	3	**Kaisersl. (SWF)**, G.
—	363	3	**Sigmaringen (SWF)**
—	363	5	**R. Barcelona** - Sp.
833	360.5	1	**Benghazi (FBS)**, Libya
836	359	10	**Ylivieska** - Finland

kc/s	Metres	kW	Stations
836	359	150	**Nancy I** - France
—	359	5	**Huelva (RNE)** - Sp.
—	359	100	**Beyrouth I** - Leb.
—	359	20	**Kharkov** - USSR
845	355	150	**Roma II** - Italy
—	355	1	**Jerusalem** - Israel
854	351.3	150	**Bucuresti I** - Rum.
—	351.3	12	**R. Madrid EAJ2,** Sp.
—	351	100	**Berlin (RIAS)** - G.
—	351	0.05	**Setif** - Algeria
863	348	150	**Paris I** - France
—	348	30	**Blagoevgrad** - Bulg.
—	348	10	**Damascus** - Syria
872	344	150	**Frankfurt AFN** - G.
—	344	5	**Petöfi II** - Hung.
—	344	36	**Budapest** - Hungary
—	344	20	**R. Zaragoza** - Sp.
—	344	150	**Moscow III** - USSR
—	344	50	**Cairo V** - Egypt
881	340.5	100	**Titograd** - Yugosl.
—	340.5	100	**Berlin (DDR)** - G.
—	341	8	**Penmon** - Gt. Br.
—	341	5	**Towyn** - Gt. Br.
—	341	2	**Wrexham** - Gt. Br.
—	341	100	**Washford** - Gt. Br.
890	337.1	200	**Alger II** - Algeria
—	337.1	15	**Linz I** - Austria
—	337.1	20	**Bergen I** - Norway
—	337.1	20	**Kristiansand** - No.
—	337.1	20	**Tröndelag** - Norway
—	337.1	50	**Uzjgorod** - USSR
—	337.1	15	**R. Gredos** - Spain
—	337.1	3	**R. Socuellamos** - Sp.
895	335	50	**R. Teheran** - Iran
899	333.7	150	**Milano I** - Italy
908	330	140	**Brookm.Prk,** Gt.Br.
—	330	200	**R. Baghdad** - Iraq
—	330	7	**Miercurea** - Ruman.
912	328.9	20	**Reichenbach (DDR)** - Germany
915	326	2	**Paphos** - Cyprus
917	327.2	5	**Tetuan II** - Morocco
—	327.2	250	**Madrid (RNE)** - Sp.
—	327.2	135	**Ljubljana I** - Yugos.
926	324	150	**Brussels II** - Belg.
—	324	10	**Nis** - Yugoslavia
—	324	10	**Cairo IV** - Egypt
935	321	27	**Rabat** - Morocco
—	321	100	**Agadir** - Morocco
—	321	20/5	**Barcelona (RNE),**
—	321	300	**Lvov** - USSR
—	321	10	**Berlin (AFN)** - G.
944	318	150	**Toulouse I** - France
—	318	20	**Voronej** - USSR
953	314.6	20	**R. Intercont.** - Sp.
—	314.6	30	**Aleppo** - Syria
—	314.6	100/15	**Praha** - Czechoslov.
962	312	100	**Turku I** - Finland
—	312	10	**Paris IV** - France
—	312	100	**Tunis II** - Tunisia
—	312	0.05	**3 low power** - Aust.
963	311.6	2	**Istanbul** - Turkey
971	309	5	**Göttingen (NDR)**
—	309	100	**Hamburg (NDR)**
—	309	100	**Langenberg (WDR)**
—	309	150	**Smolensk** - USSR
—	309	1	**Marrakech** - Mor.
976	307.4	0.5	**R. Rezaieh** - Iran
980	306.1	5	**Assiout** - Egypt
—	306.1	200	**Alger I** - Algeria
—	306.1	2	**Trieste A** - Italy
—	306.1	150	**Göteborg** - Sweden
985	302	100	**Kermanshah** - Iran
989	303.3	300/200	**Berlin (RIAS)** - G.
—	303.3	10	**Beyrouth** - Lebanon
998	300.6	10	**Heidelberg (SDR)** -
—	300.6	0.2	**Buchen (SDR)** - G.
—	300.6	400	**R. Andorra** - And.
—	300.6	100	**Kishinjov** - USSR
1007	297.9	6	**Malaga (RNE)** - Sp.
—	297.9	120	**Hilversum II** - Holl.
—	297.9	50	**Corfu** - Greece
1016	295	300	**Rheinsender (SWF)**
—	295	1	**Batna** - Algeria
—	295	1	**Tanger II** - Morocco
1025	292.7	100	**Dobl** - Austria
—	292.7	100	**Kronstorf** - Austria
—	292.7	10	**Lauterach II** - Aust.
—	292.7	5	**Mariapfarr II** - Aust.
—	292.7	0.05	**3 low power** - Aust.
—	292.7	0.5	**Haifa** - Israel
—	292.7	5	**R. S. Sebastian** - Sp.
—	292.7	1	**2 low power** - Mor.
1033	290.4	2	**Izmir** - Turkey
1034	290.4	0.25	**2 low p. (AFN)** - G.
—	290.1	20	**Milano II** - Italy
—	290.1	25	**Venezia II** - Italy
—	290.1	10	**Genova II** - Italy
—	290.1	5	**San Remo II** - Italy
—	290.1	5	**Pescara II** - Italy
—	290.1	25	**Napoli II** - Italy
—	290.1	100	**Tallinn I** - USSR
—	290.1	25	**R. Clube Portuguese**
1043	287.6	5	**Thessaloniki** - Gr.
—	287.6	240	**Dresden (DDR),** G.
—	287.6	25	**Sebaa-Aioun,** Mor.
1052	285.3	0.05	**2 low power** - Aust.
—	285.3	20	**Tetuan I** - Morocco
—	285.3	2	**Barnstaple** - Gt. Br.
—	285.3	120	**Start Point** - Gt. Br.
—	285.3	0.25/1	**3 low power** - Spain
—	285.3	50	**Iasi** - Rumania
—	285.3	50	**R. Tripoli** - Libya
—	285.3	20	**Suhl (DDR)** - G.
1060	285	1	**R. Shiraz** - Iran
1061	283	25	**Norte II** - Portugal
—	283	60	**Kalundborg II,** Den.
—	283	20	**Cagliari I** - Italy
—	283	1	**Livorno I** - Italy
1063	282.2	2	**Ankara** - Turkey
1070	280	100	**Paris II** - France
	280	20	**Dnjepropetr** - USSR
1079	278	5	**Minia** - Egypt
—	278	5	**Luxor** - Egypt
—	278	2	**Bremerhafen** - G.
—	278	60	**Katowice** - Poland
—	278	1	**Souk Ahras** - Alg.
—	278	20	**Plauen (DDR)** - G.
—	278	0.2/2	**3 low power** - Spain
—	278	20	**La Voz de Madrid,**
—	278	5	**Voz de Levante** - Sp.
—	278	5	**La Voz de Vigo** - Sp.
—	278	5	**Voz de Navarra,** Sp.
1088	276	150	**Droitwich** - Gt. Bt.
—	276	7.5	**Postwick** - Gt. Br.
—	276	50	**Tirana** - Albania
1090	275	1	**R. Kerman** - Iran
1094	274	2	**R. Panades** - Spain
1097	273.5	150	**Bratislava** - Czecho.
—	273.5	1/2	**7 low power,** Spain
—	273.5	1	**Haifa** - Israel
1100	272	1	**R. Mashhad** - Iran
1106	271.2	100	**Munich (AFN)** - G.
—	271.2	0.04/2	**15 low power** - Spain
—	271.2	15	**R. España** - Spain
—	271.2	5	**Voz de Jaen** - Spain
—	271.2	100	**Vilnius II** - USSR
1115	269.1	50	**Bologna II** - Italy
—	269.1	5	**Messina II** - Italy
—	269.1	2	**Trieste II** - Italy
—	269.1	1	**Aosta II** - Italy
—	269.1	40	**Bari II** - Italy
—	269.1	10	**Pisa II** - Italy
—	269.1	0.04/1	**9 low power** - No.
—	269.1	50	**Moscow I** - USSR
—	269.1	1	**Tanger II** - Morocco
1116	268.8	1.5	**Ondas del Sil** - Sp.
1120	267	0.3	**R. Cazorla** - Spain
1124	266.9	10	**Barcelona** - Spain
—	266.9	10	**Bruxelles IV** - Belg.
—	266.9	10	**Varna** - Bulgaria
—	266.9	0.1/0.5	**14 low power** - Aust.
—	266.9	20	**Leningrad III** - USSR
—	266.9	7	**Oradea** - Rumania
1126	266.4	1	**R. Carzola** - Spain
1130	265	10/100	**R. Kuwait** - Kuwait
1133	264.8	5	**Bilbao (EAJ28)** - Sp.
—	264.8	135	**Zagreb** - Yugoslavia
—	264.8	20	**Rijeka** - Yugoslavia
—	264.8	50	**Hvar** - Yugoslavia
—	264.8	2	**Zadar** - Yugoslavia
—	264.8	2	**Adana** - Turkey
1142	262.7	40	**Constantine** - Alg.
—	262.7	8	**R. Toledo** - Sp.
—	262.7	40	**Oran** - Algeria
—	262.7	0.05	**6 low power** - Aust.
—	262.7	1/0.25	**5 low power (AFN)**
—	262.7	5	**Bremerhafen (AFN)**
—	262.7	10	**Stuttgart (AFN)**
—	262.7	1	**Florina** - Greece
—	262.7	5	**Sohag** - Egypt
—	262.7	20	**Kaliningrad** - USSR
—	262.7	1/2	**3 low power** - Spain
1150	260.9	1	**R. Melilla** - Spain
1151	260.6	2	**Scarborough** - Gt.B.
—	260.6	100	**Stagshaw** - Gt.Br.
—	260.6	1	**Marrakech** - Mor.
—	260.6	50	**Cluij** - Rumania
—	260.6	2	**Alcira** - Spain
1160	258.6	150	**Strasbourg I** - Fr.
—	258.6	30	**Kardjali** - Bulg.
1165	257.5	2	**Kars** - Turkey
1169	256.6	10	**Porto** - Portugal
—	256.6	6	**Koper** - Yugoslavia
—	256.6	5	**Ulm (SDR)** - G.
—	256.6	10	**Heilbronn (SDR)**-G.
—	256.6	10	**Thessaloniki** - Gr.
—	256.6	150	**Kiev** - USSR
—	256.6	1	**Jerusalem** - Israel
1178	254.7	100	**Hörby** - Sweden
—	254.7	10	**Assouan** - Egypt
—	254.7	5	**Cuenca (RNE)** - Sp.
—	254.7	10	**BBC** - Malta
1187	252.7	1	**Casablanca II** - Mor.
—	252.7	2/0.1	**26 low power** - Sp.
—	252.7	135	**Szolnoc I** - Hungary
1196	251	300	**Munich (VOA)** - G.
1200	250	2	**V. de la Huerta** - Sp.
—	250	2	**Cieza** - Spain
1205	249	100	**Bordeaux I** - France
—	249	60	**Krakow** - Poland
—	249	60	**Rzescow** - Poland
—	249	10	**Haifa** - Israel
1214	247	50	**Brookmans Park** -
—	247	20	**Burghead** - Gt.Br.
—	247	10	**Lisnagarvey** - Gt.B.
—	247	50	**Moorside Edge**
—	247	50	**Westerglen** - Gt.Br.
—	247	2/0.25	**5 low power** - Gt.Br.
—	247	1	**R. Malta** - Malta
—	247	20	**Kursk** - USSR
—	247	20	**Tallinn II** - USSR
1223	245.3	30	**Stara Zagora** - Bul.
—	245.3	15	**V. de Andalucia** - Sp.
—	245.3	5	**V. del Principado** - Spain
—	245.3	5	**V. de Guipuzcoa**-Sp.
—	245.3	5	**V. de Cataluna** - Sp.
—	245.3	1	**5 low power** - Spain
—	245.3	100	**Falun** - Sweden
1225	244.9	3	**R. Moron** - Spain
1232	243.5	50	**Tanger** - Morocco
—	243.5	100	**Bratislava** - Czecho.
1241	241.7	2	**Ganziantep** - Turkey
—	241.7	25	**Vaasa** - Finland
—	241.7	20	**Lille II** - France
—	241.7	20	**Marseilles II** - Fr.
—	241.7	20	**Nancy II** - France
—	241.7	20	**Nice III** - France
—	241.7	20	**Brest I** - France
—	241.7	24	**Rennes II** - France
—	241.7	50	**Tiraspol** - USSR
1248	240	1	**Tenerife** - C. Isl.
1250	240	5	**Dublin, Cork** - Irel.
—	240	135	**Balatonszab** - Hung.
—	240	5	**Barcelona (EFJ)** -
—	240	3.5	**R. Costa Dprada** Sp.
—	240	2/0.2	**26 low power** - Sp.
1259	238.3	150	**Rhodos (VOA)** - Gr.
—	238.3	5	**R. Valencia** - Sp.
—	238.3	20	**Zielona Gora** - Pol.
—	238.3	50	**Wroclaw** - Poland
1268	236.6	100	**Novi Sad** - Yugosl.
—	236.6	2	**R. Asturias** - Spain
1277	234.9	10	**Alexandria** - Egypt
—	234.9	10	**Assuan II** - Egypt

kc/s	Metres	kW	Stations
1277	234.9	100	**Strasbourg II** - Fr.
—	234.9	2	**3 low power** - Spain
—	234.9		**Moscow III** - USSR
1285	233.5	1	**R. Marchena** - Spain
1286	233	100	**CS I** - Czecoslov.
—	233	2	**Lisboa** - Portugal
1295	231.7	30	**Kolarovgrad** - Bulg.
—	231.7	150	**Crowbor.** - Gt.Br.
—	231.7	0.5	**R. Coruña** - Spain
—	231.7	1	**Rabat III** - Morocco
—	231.7	2	**Antalya** - Turkey
1300	230.6	35	**Athens (FBS)** - Gr.
1304	230	20	**Constantine II** - Alg.
—	230	20	**Oran II** - Algeria
—	230	0.25/1	**6 low power (AFN)**
—	230	0.5	**Güimar** - C. Isl.
—	230	160	**Szczecin** - Poland
—	230	30	**Gdansk** - Poland
—	230	0.2/2	**7 low power** - Spain
1313	228.5	100	**Stavanger** - Norway
—	228.5	5	**Las Palmas** - C. Isl.
—	228.5	0.1/0.05	**14 low Power**-Aust.
—	228.5	20	**Athens (FBS)** - Gr.
—	228.5	5	**R. Miramar** - Spain
—	228.5	2	**R. Salamanca** - Sp.
1315	228	2	**Constanza** - Rum.
1322	226.9	1	**Safi II** - Morocco
—	226.9	150	**Leipzig (DDR)** - G.
—	226.9	0.5	**R. Ribatejo** - Port.
—	226.9	1/2	**5 low power** - Spain
—	226.9	100	**Kharkow** - USSR
1325	226.4	100	**R. Tehran** - Iran
1331	225.4	1/2	**4 low power** - Italy
—	225.4	80	**Roma I** - Italy
—	225.4	50	**Genova I** - Italy
—	225.4	25	**Bologna I** - Italy
—	225.4	25	**Pescara I** - Italy
—	225.4	20	**Bari I** - Italy
—	225.4	12	**Palermo I** - Italy
—	225.4	20	**Tallinn** - USSR
1336	226.6	1.5	**Haifa** - Israel
1338	224.2	2	**Huelva** - Spain
—	224.2	2	**Velez-Malaga** - Sp.
1340	223.8	25	**Nyiregyháza,** Hung.
—	223.8	25	**Szombathely,** Hung.
—	223.8	15	**Pécs** - Hungary
—	223.8	100	**Lisnagarvey** - Gt.B.
—	223.8	0.25	**Londonderry** - Gt.B.
—	223.8	3.2	**V. de Ci. Real** - Sp.
—	223.8	0.5/2	**4 low power** - Spain
1345	223.2	1/100	**R. Kuwait** - Kuwait
1349	222.4	10	**Nantes I** - France
—	222.4	20	**Bordeaux II** - Fr.
—	222.4	20	**Limoges II** - France
—	222.4	20	**Grenoble I** - France
—	222.4	20	**Toulouse II** - Fr.
—	222.4	0.2	**Korca** - Albania
—	222.4	0.4	**2 low power** -Hung.
—	222.4	20	**Valmiera** - USSR
—	222.4	20	**Kuldiga** - USSR
—	222.4	20	**Madona** - USSR
1350	222.2	20	**Baghdad** - Iraq
1355	221.3	1	**Kavalla** - Greece
1358	221	0.1/1	**2 low power** - Port.
—	221	20	**Bremen** - Germany
—	221	1	**Tirana** - Albania
—	221	5	**V. de Extremadura** - Spain
—	221	0.09/2	**18 low power** - Sp.
—	221	0.5	**Haifa** - Israel
—	221	50	**Berlin (DDR)** - G.
1367	219.5	0.1/2	**10 low power** - Italy
—	219.5	25	**Venezia III** - Italy
—	219.5	12	**Napoli III** - Italy
—	219.5	10	**Milano III** - Italy
—	219.5	10	**Genova III** - Italy
—	219.5	5	**Roma III** - Italy
—	219.5	5	**Torino III** - Italy
—	219.5	2.5	**R. Antequera** - Sp.
—	219.5	0.5	**Savièse** - Switz.
—	219.5	50	**Lodz II** - Poland
—	219.5	60	**Bialystok** - Poland
—	219.5	60	**Lublin** - Poland
—	219.5	10	**Porto** - Portugal
—	219.5		**Moscow II** - USSR
1376	218	150	**Lille I** - France
1385	217	0.26/1	**6 low power** - Spain
—	217	5	**Voz de Gran.** - Sp.
—	217	3	**R. Marbella** - Spain
—	217	2	**R. Tarrega** - Spain
—	217	5	**V. del Noreste** - Sp.
—	217	50	**Athens II** - Greece
—	217	150	**Kaunas** - USSR
1390	215.8	5	**R. Badajoz** - Spain
—	215.8	100	**R. Ahwaz** - Iran
1392	215	1	**R. Zamora** - Spain
1394	215	1	**Tripoli (FBS)** - Lib.
—	215.2	25	**Graz** - Austria
—	215.2	0.05/0.2	**4 low power**-Austr.
—	215.2	0.25	**Bitburg (AFN)** - G.
—	215.2	0.25	**Hof (AFN)** - G.
—	215.2	0.25/0.15	**19 low power** - Sw.
—	215.2	1	**Angra** - Azores
—	215.2	2	**R. Almeria** - Spain
—	215.2	2	**Pamplona (EAJ6)**
1400	214	0.01	**2 low power** - Icel.
1403	213.8	0.7/2	**2 low power** - Spain
—	213.8	10	**Montpellier I** - Fr.
—	213.8	20	**Rouen** - France
—	213.8	20	**Nice II** - France
—	213.8	20	**Brest II** - France
—	213.8	8	**Bastia** - France
—	213.8	20	**Cl. Ferrand** - France
—	213.8	20	**Pau** - France
—	213.8	5	**Comotini** - Greece
—	213.8	20	**Tartu** - USSR
1412	212.4	3	**B. Mergentheim** - G.
—	212.4	2	**2 low power** - Sp.
—	212	6	**Maribor** - Yugosl.
—	212	2	**Osijek** - Yugoslavia
—	212	20	**Gospic** - Yugoslavia
—	212	2	**Split** - Yugoslavia
—	212	100	**Pristina** - Yugosl.
—	212	2	**Helsinki II** - Finl.
—	212	0.4	**Turku II** - Finland
—	212	0.5	**Club Tenerife**-C.Isl.
—	212	0.02	**2 low power** - Icel.
1421	211.2	40	**Aiger III** - Algeria
—	211.2	100	**BBC** - Cyprus
—	211.2	100	**R. Saarbrücken** - G.
—	211.2	1	**Tampere** - Finland
—	211.2	10	**Riga** - USSR
1425	211	1	**Malta (FBS)**
—	211	7.5	**Nicosia** - Cyprus
—	211	1	**R. Isfahan** - Iran
1428	210.5	2	**Baia Mare** - Rum.
1430	210	10	**Copenhagen II,** Den.
—	210	70	**Skive** - Denmark
—	210	0.2	**Gjirokaster** - Alb.
—	210		**Berlin (DDR)** - G.
—	210	2	**R. Reus** - Spain
—	210	3	**R. Sabadell** - Spain
1439	208	350	**Luxembourg II**
—	208	5	**R. Mallorca** - Spain
—	208	1	**Tobruk (FBS)** - Lib.
—	208	1	**Nicosia (FBS)** - Cyp.
1448	207.2	20	**Torino II** - Italy
—	207.2	12	**Palermo II** - Italy
—	207.2	5	**Ancona II** - Italy
—	207.2	5	**Catania II** - Italy
—	207.2	5	**Firenze II** - Italy
—	207.2	5	**Sassari II** - Italy
—	207.2	0.25/2	**27 low power** - Italy
—	207.2	3	**Pyrgos** - Greece
—	207.2	0.2/2	**7 low power** - Spain
—	207.2	0.15/2	**12 low power** - Sw.
—	207.2	1	**Coimbra** - Port.
1449	207	0.2	**R. Cordoba** - Spain
1450	206.9	2	**R. Penarroya** - Sp.
—	206.9	1	**V. del Valle** - Spain
1457	206	0.05	**3 low power** - Aust.
—	206	2	**Redruth** - Gt.Br.
—	206	20	**Clevedon** - Gt.Br.
—	206	10	**Bartley** - Gt.Br.
—	206	2	**Brighton** - Gt.Br.
—	206	1	**Folkestone** - Gt.Br.
—	206	2	**Bexhill** - Gt.Br.
—	206	20	**Craiova** - Rumania
—	206	1	**R. Onteniente** - Sp.
—	206	3.8	**R. Orense** - Spain
1462	205	1	**R. Gorgan** - Iran
1466	204.6	400	**Monte Carlo** - Mon.
—	204.6	0.25/1	**6 low power** - Nor.
1475	203.4	2	**3 low power** - Spain
—	203.4	150	**Wien I** - Austria
—	203.4	1	**R. Sanandaj** - Iran
1480	202.7	0.04/1	**9 low power** - Spain
—	202.7	20	**R. Gredos** - Spain
—	202.7	2	**R. Teruel** - Spain
—	202.7	2.5	**R. Ronda** - Spain
—	202.7	2	**R. Tudela** - Spain
—	202.7	2	**R. Atlantico** - C. Isl.
—	202.7	0.4	**La Orotava** - C. Isl.
1483	202.3	3	**Voz de Ubeda** - Sp.
1484	202.2	0.2	**St. Pölten** - Aust.
—	202.2	2	**Copenhagen I** - Den.
—	202.2	0.25	**Ålborg** - Denmark
—	202.2	2	**Tønder** - Denmark
—	202.2	1	**Pietarsaari** - Finl.
—	202.2	1	**Pori** - Finland
—	202.2	0.05/1	**8 low power** - Finl.
—	202.2	0.5/1	**R. Gibraltar**
—	202.2	2	**Brasov** - Rumania
—	202.2	2	**Sibiu** - Rumania
—	202.2	2	**Tg. Mures** - Rum.
—	202.2	0.1	**Portalegre** - Port.
—	202.2	2	**Barrow** - Gt.Br.
—	202.2	2	**Ramsgate** - Gt.Br.
—	202.2	1	**Volos** - Greece
—	202.2	5	**Freies Berlin** - G.
—	202.2	0.2	**16 low power** - G.
—	202.2	0.25	**Keflavik** - Iceland
—	202.2	0.02	**4 low power** - Icel.
—	202.2	2/0.1	**14 low power** - It.
—	202.2	1	**R. Madeira**
—	202.2	10	**Benghazi** - Libya
—	202.2	1	**Tobruk (FBS)** - Lib.
—	202.2	0.25/1	**5 low power** - Nor.
—	202.2	8	**Lodz** - Poland
—	202.2	1/2	**6 low power** - Pol.
—	202.2	0.5	**Limassol** - Cyprus
—	202.2	5	**Bruxelles IV** (F)
—	202.2	0.5	**Bruxelles III** (Fl.)
—	202.2	0.01/2	**42 low p.** - Yugosl.
—	202.2	2	**2 low power** - Czech.
—	202.2	5	**Riga** - USSR
—	202.2	0.5/1	**10 low power** - Sp.
—	202.2	2	**Voz del Mar** - Sp.
—	202.2	2	**Voz de Baeza** - Sp.
—	202.2	2	**Voz del Cinca** - Sp.
—	202.2	2.5	**R. Tudela** - Spain
—	202.2	3	**R. Teruel** - Spain
—	202.2	2.5	**R. Extremadura**
—	202.2	2	**R. Rioja** - Spain
—	202.2	1	**Casablanca III** - Mor.
1487	202.1	1	**R. Lugo** - Spain
1492	202.1	3	**R. Manresa** - Spain
—	202.1	2	**R. Gijon** - Spain
—	202.1	0.8	**R. Huéscar** - Spain
1493	201	1/2	**3 low power** - Spain
—	201	4	**Bayonne** - France
—	201	0.05/1	**8 low power** - Fr.
—	201	5	**Rhodos** - Greece
—	201	0.05	**8 low power** - Aust.
—	201	100	**Tallinn** - USSR
—	201	20	**Gomel** - USSR
1500	200	0.2	**AFRS** - Azores
—	200	0.7	**2 low power** - Spain
1502	199.7	0.25	**5 low power (AFN)**
—	199.7	2	**R. Leon** - Spain
—	199.7	0.2	**3 low power** - Spain
—	199.7	0.8	**Münster (WDR)** - G.
—	199.7	500	**Warszawa III** - Pol.
—	199.7	1	**R. Segovia** - Spain
1510	198.5	0.02	**3 low power** - Icel.
1511	198.5	2	**R. Murcia (EAJ17)**
—	198.5	0.5	**R. Algeciras** - Spain
—	198.5	20	**Brussels III** - Belg.
—	198.5	—	**Berlin** - Germany
—	198.5	0.2	**Patras** - Greece
—	198.5	5	**Chania** - Greece
1520	197.4	1	**CS I** - Czecho.
—	197.4	0.02	**Reydarfjördur,** Icel.
—	197.4	2	**R. Atalaya** - Spain
—	197.4	0.5/1	**9 low power** - Spain
—	197.4	0.01	**AFRS** - Turkey
1529	196.2	0.075	**Porjus** - Sweden
—	196.2	100	**Vatican Radio**

kc/s	Metres	kW	Stations
1538	195	300	**Mainflingen (D.funk)** - Germ.
—	195	5	**R. Elche** - Spain
1545	194.2	0.02	**Stödvarfjördur,** Icel.
1546	194	0.25/1	**13 synchr.** - Gt. Br.
—	194	5	**Seelow (DDR)** - G.
—	194	0.1/0.05	**4 low power** - Aust.
—	194	50	**Vinnitsa** - USSR
1554	193.1	60	**Nice I** - France
—	193.1	20	**Baranovitchi,** USSR
1562	192.1	1.25	**Amalias** - Greece
—	192.1	1	**Colvilha** - Portugal
—	192.1	2/0.06	**14 low power** - Sw.
1570	191.1	10	**Flensburg** - Germ.
—	191.1	20	**Bernburg (DDR),** G.
—	191.1	5	**V. Mediterraneo,** Sp.
—	191.1	0.25	**Heraklion** - Greece
—	191.1	0.004/0.025	**3 AFRS** - Turkey
—	191.1	1	**SantaMaria** - Azores
1575	190.5	0.2	**R. Callosa** - Spain
1578	190.1	2/0.1	**20 low power** - Italy
—	190.1	10	**Porto** - Portugal
—	190.1	10	**Fredrikstad** - Nor.
—	190.1	1.3	**Nordkapp** - Norway
1580	190	0.01	**AFRS** - Turkey
1586	189.1	5	**Kiel (NDR)** - G.
—	189.1	5	**Osnabrück (NDR)** -
—	189.1	5	**Bonn (WDR)** - G.
—	189.1	3	**Kleve (WDR)** - G.
—	189.1	20	**Hannover (NDR)** -
—	189.1	40	**Oldenburg (NDR)** -
1594	188.2	15	**Miskolc** - Hung.
—	188.2	0.4	**Magyaróvár** - Hung.
—	188.2	15	**Balatonszab.,** Hung.
—	188.2	0.6	**Bougie** - Algeria
—	188.2	2	**Esbjerg** - Denmark
—	188.2	0.05/1	**7 low power,** France
—	188.2	7.5	**Hengelo** - Holland
—	188.2	7.5	**Hoogezand** - Holl.
—	188.2	7.5	**Hulsberg** - Holland
—	188.2	0.01	**AFRS** - Turkey
—	188.2	1	**AFRS** - Libya
—	188.2	2	**Ostrava** - Czech.
—	188.2	1	**3 low power** - Pol.
—	188.2	10	**Lisboa** - Portugal
—	188.2	1	**AFRS, Athens** - Gr.
—	188.2	0.1/0.25	**2 AFRS** - Morocco
—	188.2	0.3	**Funchal** - Madeira
—	188.2	2/0.1	**8 low power** - Italy
—	188.2	0.2/0.075	**7 low power** - Sw.
—	188.2	0.05	**3 low power** - Aust.
—	188.2	0.05/0.03	**6 low power** - Yug.
—	188.2	1	**Marrakech** - Mor.
1602	187	20/40	**Nürnberg I (BR),** G.
—	187	20	**Land/Isar (BR),** G.
—	187	20	**Kirchheim (BR),** G.
—	187	1	**3 low power (BR),**
1607	186	0.9	**R. Tortosa** - Spain

SHORT WAVE STATIONS OF THE WORLD

*Standard Frequency Station. **Time Signal Station. Br. = Brazil, Cl. = Cultura, Col. = Colombia, Czecho. = Czechoslovakia, Ger. = Germany, Guat. = Guatemala, Hon. = Honduras, Isl. = Island, Venez. = Venezuela.

kc	m	kW	Call	Stations & countries	Rem.
2160	139.39	0.25	XEVJ	Chipancingo, Mexico	
2246	133.6	4		St. Denis, Reunion	
2312	130.0			Djakarta, Indonesia	
2326	129.5	20		Paradys, So. Africa	
2330	128.7	1	YDI6	Djember, Indonesia	
2340	128.4	1	YVPL	R. Nueva Esparta, Venezuela	
	128.4	0.1	TGRW	S. Cruz Barillas, Guatemala	
	128.4			Fukien, China	
	128.4	0.25	VL9BR	R. Rabaul, New Guinea	
2346	128.2	0.5	ZYV38	R. Educ. Uberlandia, Brazil	
	128.2	20		Paradys, So. Africa	
2350	127.6			Shantung, China	
	127.6	1	YDZ6	Palankaraya, Indonesia	
	127.6	1	TGSC	Voz Candelaria, Guatemala	
	127.6	1	ZYB	R.dif. Itacoatiara, Brazil	
	127.6	1	YVPH	R. Guarico, Venezuela	
2360	127.1	0.5	TGBA	R. Maya Barillas, Guatemala	
	127.1	0.25		R.dif. Parintins, Brazil	
	127.1	0.5	YVQG	R. Carupano, Venezuela	
2370	126.6	0.25		R.Cl. Fluminense, Brazil	
	126.6	1	YVQP	R. Puerto La Cruz, Venez.	
2376	126.3	20		Paradys, So. Africa	
2380	126.0	0.35	XESE	Mexico City, Mexico	
	126.0	1		R. Educ. Limeira, Brazil	
2390	125.5	1	YDN	Banda Atjeh, Indonesia	
	125.5	1	YDA6	Tjirebon, Indonesia	
	125.5	0.5	ZYV71	R. Mundo Melhor, Brazil	
	125.5	0.5		R. Cult. Monte Alto, Brazil	
2400	125.0	0.1		R. Tapyuo, Brazil	
	125.0	0.5		R.Dif. Amporo, Brazil	
2410	124.5		VL9CG	R. Gororka, New Guinea	
	124.5	0.25	4VO	R. Lumière, Haiti	
	124.5	1		R. Sirena, Brazil	
2420	124.0	0.25	YDA2	Bandung, Indonesia	
	124.0	0.3	YDU7	Singaradja, Indonesia	
	124.0	0.5	ZYV32	R. Carajá de Anapolis, Brazil	
	124.0	0.5		R. São Carlos, Brazil	
	124.0	0.25		R.dif. Maranhão, Brazil	
2425	123.7	2.5		Gwelo, So. Rhodesia	
2430	123.5	1	YDK2	Palembang, Indonesia	
	123.5	0.25		Dif. Rio Bonito, Brazil	
	123.5	1	YVPM	Esc. Radiofonicas, Venezuela	
2440	122.9	1	YDG2	Pontianak, Indonesia	
	122.9	1	YVLG	R. Girardot, Venezuela	
2450	122.5	0.25	4VSO	R.St. 4VEH, Haiti	
	122.5	0.5	ZYR231	Cultura de Aracatuba, Brazil	
	122.5	1	YVOX	R. Los Llanos, Venezuela	
2460	121.9	1	YDB	Djakarta, Indonesia	
	121.9	1	YDZ	Ternate, Indonesia	
	121.9	5		Grenada, Windward Isl.	
	121.9	0.5	ZYR99	R. Cacique, Brazil	
2470	121.5	1	YVNI	R. Carora, Venezuela	
2475	121.2			Chekiang, China	
2480	120.9	1	YDL1	Padang, Indonesia	
	120.9	1		R. Braganca, Brazil	
	120.9	1	YVPD	La Voz de Avila, Venezuela	
2485	120.7	0.2	HCRO1	R. Otavalo, Ecuador	
	120.7			Purwokerto, Indonesia	
2490	120.5	1	YDH	Semarang, Indonesia	
	120.5		YDK7	Djambi, Indonesia	
	120.5	0.3	YDQ	Makassar, Indonesia	
	120.5	1	YVSV	R. Naiguata, Venezuela	
*2500	120	0.5	MSF	Teddington, Gt. Britain	
*	120	1	WWV	Lanham, USA	
*	120	2	JJY	Tokyo, Japan	
*	120	1	OMA	Praha, Czechoslovakia	
*	120	0.3	ZLFS	Lower Hutt, New Zealand	
*	120	0.25	FFH	Bagneux, France	
2510	119.5	10	HLK50	Seoul, Korea	
2850	105.3			Pyongyang, Korea	
*3170	94.06	8	OLB5	Praha, Czechoslovakia	
3200	93.75	0.25		Em. Reg. do Norte, Mocamb.	
3202	93.69	2		Bangkok, Thailand	
3204	93.64	10		Ibadan (NBC), Nigeria	
3205	93.60	10	YDA	Bandung, Indonesia	
	93.60	10		AIR, Lucknow, India	
3210	93.44	0.25		Quelimane, Mocambique	
3215	93.30	3.5	BED59	Taipei (BCC), Taiwan	
	93.30	60		Ulan-Bator, Mongolia	
	93.30	0.25	HCLP3	Voz El Oro, Ecuador	
	93.30	0.3	OBZ4C	R. Mundo, Peru	
	93.30	5/100		R. Clube de Mozambique	
3222	93.10	30		R. Mauretania, Mauretania	
	93.10	100		Lomé, Togo	
	93.10	5		Ulan-Bator, Mongolia	
3223	93.09	2.5		AIR, Simla, India	
	93.09	1	YDV5	Mataram, Indonesia	
	93.09	1	YDX	Tdj. Pinang, Indonesia	
3225	93.05	10		ELWA, Liberia	
	93.05	15/120		Peking, China	
	93.05	1	HIDB	R. Libertad, Domin. Rep.	
3230	93.00	0.4	OBX7D	R. El Sol, Peru	
	93.00	10		R. Comercial de Angola	
	93.00	10	VRH8	Suva, Fiji Isl.	
	93.00	1	BED31	Taipei (BCC), Taiwan	
3232	92.82	4		Tananarive, Malagasy Rep.	
	92.82	10		R. Abidjan, Ivory Coast	
	92.82	0.3	YDM	Bukittinggi, Indonesia	
	92.82			Purwokerto, Indonesia	
	92.82	10	YDG	Surakarta, Indonesia	
3235	92.74	10		AIR Gauhati, India	
3240	92.59	1	OBX4U	R. America, Peru	
	92.59	0.2	HCJC1	R. Atuntaqui, Ecuador	
	92.59	50		Baghdad, Iraq	
3241	92.56	10	YDR3	Ambon, Indonesia	
	92.56	1	YDU2	Denpassar, Indonesia	
	92.56	1	YDM7	Sibolga, Indonesia	
	92.56	10		Peshawar, Pakistan	
3245	92.45	0.3	HCLM3	Voz de Pasaje, Ecuador	
	92.45	1	YVKT	R. Libertador, Venezuela	
	92.45	0.25	VL8BK	R. Kerema, New Guinea	
3250	92.31	20		Paradys, So. Africa	

kc	m	kW	Call	Stations & countries	Rem.
3250	92.31	10	YDO	Bandjarmasin, Indonesia	
	92.31	10	HIGW	Acción Cult. Popular, Col.	
3255	92.15	10	ELBC	Liberian Br. Corp, Liberia	
	92.15	0.3		Beira, Mozambique	
	92.15	0.5	ZYN62	R. Clube de Marilia, Brazil	
	92.15	1	YVQL	La Voz del Tigre, Venezuela	
3259	92.05	5	YDV	Kupang, Indonesia	
	92.05	0.3		Sendai, Japan	
	92.05	10		Rawalpindi, Pakistan	
3260	92.02			Kweichow, China	
	92.02	5/100		R.Cl. de Mozambique	
	92.02	4		R. Niger, Niger	
3264	91.90	4		R. TV Congolaise, Congo	
3265	91.87	0.25	ZK6	R. Rarotonga, Cook Isl.	
	91.87	1	HIRM	R. Sol, Dominican Rep.	
	91.87	4	ZYR92	R. Ribeirão Preto, Brazil	
	91.87	1	ZYK21	R. Tamandaré, Brazil	
	91.87	2	ZFY	R. Demerara, Br. Guiana	
	91.87	0.2	HCMZ6	La Voz del Rio Chimbo, Ec.	
	91.87	1	YVOC	R. Nirgua, Venezuela	
3268	91.78	2		AIR, Ranchi, India	
	91.78	1		R. Timor, Timor	
3270	91.75	4		R. Dahomey, Dahomey	
	91.75	10		Lusaka, Zambia	
	91.75	0.3	HCAH3	R. El Trebol, Ecuador	
3275	91.60	1	ZYR31	Bauru R. Clube, Brazil	
	91.60	0.2	HCVU2	Voz Urdaneta, Ecuador	
	91.60	1	YVMC	R. Mara, Venezuela	
3277	91.55	1	YDD	Djakarta, Indonesia	
	91.55			R. Kashmir, India	
	91.55	1		Port Vila, New Hebrides	
	91.55	0.1	DYB4	Silliman Univ, Philipp.	
3280	91.40	5		Grenada, Windward Isl.	
	91.40	1	OBX1E	R. Chulucanas, Peru	
3284	91.35	10	VRH9	Suva, Fiji	
3285	91.32	7.5	HISD	R. Santo Domingo, Dom. R.	
	91.32	1	ZYR89	R. Aparecida, Brazil	
	91.32	1		Emis. Educ. Rural, Brazil	
	91.32	1	YVLE	R. Puerto Cabello, Venez.	
3286	91.26	0.3	YDG6	Madiun, Indonesia	
	91.26	5	DUB4	Philipp. Br. Sce, Philipp.	
3288	91.24	4		Tananarive, Malagasy Rep.	
3290	91.10	25	HJAB	Inst. Nac. de R. y TV, Col.	
	91.10	0.5	OBZ4E	R. Cultura, Peru	
	91.10	15/120		Peking, China	
3295	91.00	1	YDY	Samarinda, Indonesia	
	91.00	1		Denpassar, Indonesia	
	91.00	10/100	VUD	AIR Delhi, India	
	91.00	10/100	VUB	AIR Bombay, India	
	91.00	1		R.Cl. Benguela, Angola	
	91.00	1	YVOG	R. Trujillo, Venezuela	
3300	90.91	5		Belize, Honduras (Br.)	
	90.91	0.5	OBX4Y	R. Junin, Peru	
	90.91	0.25		Em. Reg. do Norte, Mozam.	
	90.91	5/100		R. Clube de Mozambique	
3304	90.80	0.25	VL8BD	R. Daru, New Guinea	
3305	90.77	1	DZCA	NCDA, Philippines	
	90.77	7.5		Benghazi, Libya	
	90.77	0.25/10	VUC	AIR Calcutta, India	
	90.77	0.3	YDM2	Bukittinggi, Indonesia	
	90.77	1	HIBA	Emis. Unidas, Dom. Rep.	
	90.77	1	ZYH31	R. Educ. do Cariri, Brazil	
	90.77	1	YVKX	La Voz de la Patria, Venez.	
3306	90.73	10		Gwelo, So. Rhodesia	
3315	90.50	10		AIR Bhopal, India	
	90.50	1		Djember, Indonesia	
	90.50	4		R. Martinique, Martinique	
	90.50	0.5	ZYV63	R. Itatiaia, Brazil	
	90.50	1	YVLI	R. Maracay, Venezuela	
3316	90.46	5/10		Freetown, Sierra Leone	
3320	90.34	20		Paradys, So. Africa	
	90.34			Pyongyang, Korea (Dem.R.)	
	90.34	1	OBZ41	R. Prelatura, Peru	
3325	90.23	7.5/10		Dacca, Pakistan	
	90.23		YDZ7	Palankaraya, Indonesia	
	90.23	20	HISD	R. Santo Domingo TV, D.R.	
	90.23	0.5	ZYJ21	R. Borborema, Brazil	
	90.23	1	ZYR220	R. dif. Guarulhos, Brazil	
	90.23	0.5	OAX3P	R. Tingo Maria, Peru	
	90.23	1	YVRA	R. Monagas, Venezuela	
3326	90.20	7.5/20		Kaduna (NBC), Nigeria	
**3330	90.09	3	CHU	Dominion Observatory, Can.	
	90.09	1	OAX1M	R. Progreso, Peru	
3331	90.06	4		Dzaoudzi, Comores Isl.	
3335	89.95	0.5	ZYR59	R. Pres. Prudente, Brazil	
	89.95	1	ZYE	R. Marajoara, Brazil	
	89.95	1	YVQC	Ecos de Orinoco Venezuela	
3335	89.95	1		Lahore, Pakistan	
	89.95	10	VL9CD	R. Wewak, Papua	
	89.95	10	BED20	Taipei (BCC), Taiwan	
3336	89.95			Ziguinchor, Senegal	
3339	89.85	0.25		R. Zanzibar, Zanzibar	
3340	89.81	5/8		Kampala, Uganda	
3345	89.68	2		R. Kashmir, India	
	89.68	0.5		Fak-Fak, Indonesia	
	89.68	5	YDW2	Pontianak, Indonesia	
	89.68	2	DZB2	Call of Orient, Philipp.	
	89.68	1	YVPE	R. Central, Venezuela	
3346	89.68	20		Lusaka, Zambia	
3350	89.55	1	OAX5J	R. Independencia, Peru	
3355	89.42	7.5		AIR Kurseong, India	
	89.42	10		AIR Hyderabad, India	
	89.42	1	YDI20	Sumenep, Indonesia	
	89.42	4		R. Noumea, New Caledonia	
	89.42	0.25	HIBD	Voz Romana, Dom. Rep.	
	89.42	0.15	TGZB	R. Club, Guatemala	
	89.42	0.5	ZYV30	R. Uberlandia, Brazil	
	89.42	0.2	HCDR4	R. Miramar, Ecuador	
	89.42	1	OAX3Q	R. Ondas de Huallaga, Peru	
	89.42	1	YVLC	R. Valencia, Venezuela	
3356	89.40	1	ZND	Lobatsi, Bechuanaland	
3360	89.29	0.2	TGVN	Voz Nahualá, Guatemala	
	89.29	0.5	OAX3D	R. Huánuco, Peru	
3365	89.15	0.5		Kotabaru, Indonesia	
	89.15	1	YDV	Mataram, Indonesia	
	89.15	10/100	VUD	AIR Delhi, India	
	89.15	0.5	ZYS45	R. Dif. do Parana, Brazil	
	89.15	1	YVPM	R. Tovar, Venezuela	
3366	89.12	20		Accra, Ghana	
3374	88.90	1		R. Université, Malagasy R.	
3375	88.89	10		AIR Gauhati, India	
	88.89	1	YDK7	Djambi, Indonesia	
	88.89	1	HIAD	R. San Juan, Dom. Rep.	
	88.89	1	ZYK28	R. Olinda Pernambuco, Braz.	
	88.89	1	YVMI	La Voz de la Fé, Venezuela	
3376	88.89	50		Conakry, Guinea	
	88.89	20		Paradys, So. Africa	
3377	88.80	0.3		Osaka, Japan	
3380	88.76	10		Ibadan (WNBS),Nigeria	
	88.76	1.5		St. Denis, Reunion	
	88.76	0.5		Biak, Indonesia	
	88.76	1	OAX1O	R. Chiclayo, Peru	
3385	88.63	50		Conakry, Guinea	
	88.63	0.3		Manokwari, Indonesia	
	88.63	0.25	VL9BR	R. Rabaul, New Guinea	
	88.63	1	HIDA	R. Hit Musical, Dom. Rep.	
	88.63	0.5		R. Clube Teresina, Brazil	
	88.63	1	ZYA41	R. Eldorado, Brazil	
	88.63	1	OBZ4W	R. La Voz del Valle, Peru	
	88.63	1	YVQI	R. Barcelona, Venezuela	
3390	88.50	15/120		Peking, China	
	88.50	1	OQ2AC	R. Collège, Congo	
	88.50	5	HC4HE	Voz Esmeraldas, Ecuador	
3395	88.37	1	YDP2	Medan, Indonesia	
	88.37	1		Sorong, Indonesia	
	88.37	1	YDS21	Gorontalo, Indonesia	
	88.37	10/50		Karachi, Pakistan	
	88.37	1		Lahore, Pakistan	
	88.37	0.25		Porto Amélia, Mozambique	
	88.37	1	HIAZ	R. Santiago, Dom. Rep.	
	88.37	1		R. Tapuyo de Mossoró, Braz.	
	88.37	1	YVOJ	R. Universidad, Venezuela	
3396	88.36	20		Gwelo, So. Rhodesia	
	88.36	10		Kaduna (NBC), Nigeria	
3505	85.59	1	HCSG4	Voz del Valle, Ecuador	
3510	85.47	0.2	HCNL2	Voz del Campesino, Ecuador	
3515	85.35	0.2	HCKD5	R. Centro Gualaceo, Ecuad.	
3520	85.23	0.2	HCYC4	R. Escuelas Radiales, Ecuad.	
3545	84.63	0.2	HCOT1	R. Zaracay, Ecuador	
3570	84.03	0.35	HCHG2	R. Central, Ecuador	
3607	83.22	0.6		Hiroshima, Japan	
3610	83.10	0.25	HCHA2	R. Ondas Quevedanas, Ecua.	
3615	82.99	0.4	HCGS6	R. Pillaro, Ecuador	
3630	82.64	0.25	HCOS4	Voz del Carrizal, Ecuador	
3640	82.41	0.5	HCMR1	R. Cayambe, Ecuador	
3680	81.48	0.3	HCJT1	R. Tulcan, Ecuador	
3695	81.12	0.5	HCIE1	R. Cotacachi, Ecuador	
3700	81.08	0.5	HSU90	Bangkok, Thailand	
3704	80.99	1	CR6RD	Nova Lisboa, Angola	
3710	80.86		OAX6O	R. Mollendo, Peru	
3720	80.65	0.35	HCGB4	R. Nac. Espejo, Ecuador	
3725	80.54	0.2	HCHW2	R. Rey, Ecuador	
3740	80.21	0.5	CR6RM	Mocamedes, Angola	
3745	80.05	0.2	HCJR6	V. Col. Mera, Ecuador	

kc	m	kW	Call	Stations & countries	Rem.
3755	79.90	0.4	HCBH6	R. Latacunga, Ecuador	
3780	79.30	100		R. Iran, Iran	
3805	78.85	0.5	HSU90	Bangkok, Thailand	
3824	78.46	0.1	ZNF4V	Maseru, Basutoland	
3830	78.28	15/120		Peking, China	
3835	78.20	0.35	HCWN1	Voz del Triunfo, Ecuador	
3860	77.44	15/120		Peking, China	
3890	77.12	0.5	OAX3G	R. Chimbote, Peru	
3900	76.92			Inner Mongolia, China	
3905	76.83	10/100	VUD	AIR Delhi, India	
3910	76.73	5	HLK51	Seoul, Korea	
	76.73	10/1		Tokyo (FEN), Japan	
3915	76.64	15/120		Peking, China	
	76.64	1	YDZ2	Ternate, Indonesia	
	76.64	1		Quetta, Pakistan	
	76.64	1		Lahore, Pakistan	
	76.64	10/50		Karachi, Pakistan	
3925	76.43	10/100	VUD	AIR Delhi, India	
	76.43	50	JOZ	Tokyo, Japan	
	76.43	10	VLK3	Port Moresby, Australia	
3935	76.24	5	YDH2	Semarang, Indonesia	
	76.24	10		Peshawar, Pakistan	
3940	76.15	2.5	ZBW3	R. Hong Kong	
	76.15	10		Peshawar, Paksistan	
	76.15	35/100		Okinawa (VOA), Ryukyu Isl.	
3945	76.05	10	YDU2	Denpassar, Indonesia	
	76.05	10	JOZ4/5	Tokyo, Japan	
	76.05	10/50		Karachi, Pakistan	
	76.05	10		Rawalpindi, Pakistan	
	76.05	0.5	DXB3	Cotabato, Philipp.	
	76.05	0.25	HCDY4	R. Iris, Ecuador	
3950	75.95	7.5/10		Dacca, Pakistan	
	75.95	1		Lahore, Pakistan	
	75.95	0.3	HCZP1	R. Rumichaca, Ecuador	
3952	75.90	15/100		BBC, London, Gt. Britain	
	75.90	0.5		R. Pax, Mozambique	
3955	75.85	7.5/10		Dacca, Pakistan	
	75.85	10/50		Karachi, Pakistan	
	75.85	10		Zomba, Malawi	
3958	75.78	0.5		Stanley, Falkland Isl.	
3960	75.76	5	CR4AA	R.Cl. Cabo Verde	
	75.76	1	CR4AC	R. Barlavento, Cape Verde I.	
	75.76	10	YDL2	Padang, Indonesia	
	75.76	10/100/250		R. Free Europe, Germany	
	75.76	0.5	OAX7O	R. Madre de Dios, Peru	
3965	75.67	50/250		Monrovia (VOA), Liberia	
	75.67	10		Peshawar, Pakistan	
	75.67	7.5/10		Dacca, Pakistan	
	75.67	1	BED67	Taichung (BCC), Taiwan	
	75.67	0.3	HCJH1	R. Turismo, Ecuador	
3970	75.57			Inner Mongolia, China	
	75.57	0.6		Matsuyama, Japan	
	75.57	0.6		Sapporo, Japan	
	75.57	0.3		Nagoya, Japan	
	75.57	1	CR6SG	R.Clube Huila, Angola	
	75.57	10/100/250		R. Free Europe, Germany	
3972	75.51	20		Ulan Bator, Mongolia	
3975	75.47	15/100		BBC, London, Gt. Britain	
	75.47	1		R.Clube Benguela, Angola	
	75.47	10	YDI2	Surabaja, Indonesia	
	75.47	0.6	HCSN6	R. Sira, Ecuador	
3980	75.38	100		Munich (VOA), Germany	
	75.38	10		R. Comercial de Angola	
	75.38	2.5/5		Enugu (NBC), Nigeria	
	75.38	0.4	HCOF4	Voz de Chone, Ecuador	
3985	75.28	50		R. Kabul, Afghanistan	
	75.28	15/120		Peking, China	
	75.28	0.25		Merauke, Indonesia	
	75.28	7.5/10		Dacca, Pakistan	
	75.28	0.25	9UB92	R. Cordac, Burundi	
	75.28	1	HCER5	Esc. Radiofonica Pop, Ecuad.	
3990	75.19	20/50		R. Liberty, Germany	
	75.19	10/100/250		R. Free Europe, Germany	
	75.19	50		Baghdad, Iraq	
	75.19	1		AFRTS, Taiwan	
	75.19	0.5	HCJA5	Voz del Rio Tarqui, Ecuador	
3995	75.09	10/100/250		R. Free Europe, Germany	
	75.09			R. Roma, Italy	
	75.09	5	VQO3	Solomon Isl.	
4000	75.00			Inner Mongolia, China	
	75.00			Bayinor, China	
4008	74.81			Frunze, USSR	
4020	74.63	120/240		Peking, China	
**4025	74.50		GIC24	Hailsham, Gt. Britain	
4035	74.40			Tibet, China	
4055	73.98			Petropavlovsk, USSR	
4060	73.89			Petropavlovsk, USSR	

kc	m	kW	Call	Stations & countries	Rem.
4068	73.75			Inner Mongolia, China	
4070	73.73	25		Ulan Bator, Mongolia	
4080	73.53			Semipalatinsk, USSR	
4092	71.88			Yuzhno-Sakh, USSR	
4100	71.17			Kzyl Orda, USSR	
4220	71.09			Sinkiang, China	
4250	70.59	15/120		Peking, China	
4310	69.61			Chimkent, USSR	
4355	68.89			Nukus, USSR	
4405	68.10			Khabarovsk, USSR	
4425	67.80			Dudinka, USSR	
4430	67.72			Novosibirsk, USSR	
4460	67.18	15/120		Peking, China	
4485	66.89			Petropavlovsk, USSR	
4486	66.88			Ufa, USSR	
4494	66.78	7.5/20		Omdurman, Sudan	
4500	66.67			Sinkiang, China	
	66.67	15/120		Peking, China	
4510	66.52			Andizhan, USSR	
4520	66.37			Khanty Mansiysk, USSR	
4525	66.25			Silingol, China	
4544	66.00			Alma-Ata, USSR	
4560	65.79			Guryev, USSR	
	65.79			Tula, USSR	
	65.79	0.2	VSI8	Grand Turk Isl.	
4570	65.65			Petropavlovsk, USSR	
4600	65.22	5	9NB7	R. Nepal, Nepal	
4610	65.08			Khabarovsk, USSR	
4640	64.60			Dushanbe, USSR	
4665	64.30			Baku, USSR	
4684	64.05			Hanoi, Vietnam (Dem. Rep.)	
4750	63.16	7.5	YDQ4	Makassar, Indonesia	
	63.16	2	ZYF23	R.Dif. Maranhão, Brazil	
	63.16	0.25	HCBK2	R. El Mundo, Ecuador	
4755	63.09	0.25/0.45	CR4AB	R.Cl. Mindelo, Cape Verde I.	
	63.09	0.3	HS2PN	Bangkok, Thailand	
	63.09	1/0.5	ZYY3	R. Brasil, Brazil	
	63.09	2.5	HJH1	Reina de Colombia, Col.	
	63.09	0.2	HCLJ6	Voz de Bolivar, Ecuador	
4756	63.08	10	VRH4	Suva, Fiji	
4760	63.03	10/100	VUD	AIR Delhi, India	
	63.03	2.5		AIR Simla, India	
	63.03			Dzhambul, USSR	
	63.03	0.5	OAX3W	R. Tingo Maria, Peru	
	63.03	1	YVKV	Emis. Vargas, Venezuela	
4762	63.00	0.25	OCX4W	R. Inca, Peru	
4765	62.95	1		R.Clube de Sao Tomé	
	62.95	1	ZYN37	Feira de Santana, Brazil	
	62.95	1	HC2AK	R.dif. del Ecuador, Ecuador	
4770	62.89	0.5	CR6RG	R. Diamang, Angola	
	62.89	10		ELWA, Liberia	
	62.89			Sinkiang, China	
	62.89	0.4	HCMX4	R. Cenit, Ecuador	
	62.89	0.5	OAX2G	R. Cajamarca, Peru	
	62.89	1	YVNW	Ondas del Caribe, Venezuela	
4775	62.84	50		R. Kabul, Afghanistan	
	62.84	1	HRLC	R. Continental, Honduras	
	62.84	5	ZYH29	R. Dragão do Mar, Brazil	
	62.84	5	ZYR81	R. Progresso, Brazil	
	62.84	1	HJKW	La Voz de Maria, Colombia	
	62.84	0.2	HCEH3	R. El Progreso, Ecuador	
4777	62.80	30		R. Gabon, Gabon	
4780	62.76	4		R. Djibouti, Fr. Somaliland	
	62.76	1	HIAS	Onda Musical, Dom. Rep.	
	62.76	1	HCLC1	R. Atahualpa, Ecuador	
	62.76	1	YVLA	Voz de Carabobo, Venezuela	
4783	62.72	18		R. Mali, Mali	
4785	62.70	30		R. Niger, Niger	
	62.70	10		Dar-es-Salaam, Tanganyika	
	62.70	1		Lahore, Pakistan	
	62.70	10	VRH5	Suva, Fiji	
	62.70	1	CP74	R. Indoamerica, Bolivia	
	62.70	0.5	ZYM8	R. Ribamar, Brazil	
	62.70	1	ZYY20	R. Dif. do Guaporé, Brazil	
	62.70	1	OAX3V	R. Tingo Maria, Peru	
4788	62.68	2	CR6RY	Novo Redondo, Angola	
4790	62.63	7.5/10		Dacca, Pakistan	
	62.63	10		R. Malaysia, Malaya	
	62.53	0.5	HRST	R. Primero de Mayo, Hond.	
	62.63	0.25	HCAU2	R. Reloj, Ecuador	
	62.63	0,4	OAX5X	R. Nazca, Peru	
	62.63	5	YVQN	Ondas Porteñas, Venezuela	
4795	62.57	4		R. Brazzaville, Congo	
	62.57	0.25		R. Zanzibar, Zanzibar	
	62.57	50	XZK2	Rangoon, Burma	
	62.57	1	CP73	R. Nueva America, Bolivia	
	62.57	2	PRI4	R. Tabajara, Brazil	

kc	m	kW	Call	Stations & countries	Rem.
4795	62.57	1	HJFU	Voz del Comercio, Col.	
4797	62.54	10		R. Somali, Somali	
4800	62.50	1	CR6RD	Nova Lisboa, Angola	
	62.50	0.25	HCSV5	R. Amazonas, Ecuador	
	62.50	0.5	OBX7C	R. Onda Azul, Peru	
	62.50	1	YVME	Ondas del Lago, Venezuela	
4804	62.45	5		Kisumu, Kenya	
4805	62.43	20	YDB2	Djakarta, Indonesia	
	62.43	5	ZYS8	R.Dif. do Amazonas, Brazil	
	62.43	0.5	HJAU	Universidad Antioquia, Col.	
4807	62.41	4		St. Denis, Reunion	
	62.41	1		Lahore, Pakistan	
	62.41	10/50		Karachi, Pakistan	
	62.41	7.5/10		Dacca, Pakistan	
4810	62.37	20		Paradys, So. Africa	
	62.37	1		Banmethuot, Vietnam	
	62.37	0.2	HCLS3	R. Coro S. Cecilia, Ecuador	
	62.37	1	YVMG	R. Popular, Venezuela	
4815	62.31	25		Ouagadougou, Upper Volta	
	62.31	1	ZYP33	Petropolis R. Dif., Brazil	
	62.31	1	ZYH27	R. Icarema Fortaleza, Brazil	
	62.31	0.3	HCFA4	Voz de Manabi, Ecuador	
	62.31	1	OAX8X	R. Amazonas, Peru	
	62.31	1	OAX5U	R. La Voz, Peru	
4820	62.24	3.1		R. Gambia, Gambia	
	62.24	0.25/10	VUC	AIR Calcutta, India	
	62.24	22.5		R. Malaysia, Singapore	
	62.24	0.2	XEJG	Guadalajara, Mexico	
	62.24	0.4	OAZ4G	R. La Oroya, Peru	
	62.24	1	YVRC	Voz de Apure, Venezuela	
4825	62.18			R. Ashkhabad, USSR	
	62.18	1	CP70	R. Grigota, Bolivia	
	62.18	0.5	ZYV56	R.Cl. de Varginha, Brazil	
	62.18	0.5	ZYE7	Educadora de Parnaiba, Br.	
	62.18	1	HJHC	R. Nariño, Colombia	
	62.18	0.3	OAX8R	R. San José, Peru	
4828	62.16	10		Gwelo, So. Rhodesia	
4830	62.11	5	HSK4	R. Thailand, Thailand	
	62.11	0.5	HCJS1	Ondas del Angel, Ecuador	
	62.11	5	YVOA	Voz del Tachira, Venezuela	
4835	62.05	18		R. Mali, Mali	
	62.05	5/100		R. Clube de Mozambique	
	62.05	20		R. Malaysia, Sarawak	
	62.05	0.5	ZYV37	R. Soc. Triangulo, Brazil	
	62.05	1	ZYA	R. Dif. Roraima, Brazil	
	62.05	1	HJAM	R. Buenaventura, Colombia	
	62.05		HCAP4	R. Voz del Valle, Ecuador	
	62.05	0.35	OAX7T	R. Sicuani, Peru	
	62.05	0.5	OAZ4J	R. Ritmo, Peru	
4839	61.99	10		R. Bukavu, Congo	
4840	61.98	0.3	YDU	Singaradja, Indonesia	
	61.98	10		Den Passar, Indonesia	
	61.98	10/100	VUB	AIR Bombay, India	
	61.98	0.25	VL9BR	R. Rabaul, New Guinea	
	61.98	1	HIFF	Voz Atlantico, Dom. Rep.	
	61.98		YSCB	La Voz del Pacifico, El Salv.	
	61.98	1	OAX8F	R. Atlántida, Peru	
	61.98	1	YVOI	R. Valera, Venezuela	
4843	61.95	25		R. TV Congolaise, Congo	
4845	61.92	1	CP66	R. Centenario, Bolivia	
	61.92	0.5	ZYU8	R.Dif. de Teresina, Brazil	
	61.92	1	HJGF	R. Bucaramanga, Colombia	
	61.92	0.38	HCRM3	R. Cultural Machala, Ecuad.	
	61.92	1	OAX1X	R. Chira, Peru	
4850	61.86	10		Forest Side, Mauritius	
	61.86			Tashkent, USSR	
	61.86	0.25	HCCV3	Ond. del Zamora, Ecuador	
	61.86	0.5	OCX4B	Nueva R. Callao, Peru	
	61.86	1	YVMS	R. Universo, Venezuela	
4855	61.79	5		Nairobi, Kenya	
	61.79	30		R. Mauritania, Mauritania	
	61.79	0.25		Nampula, Mozambique	
	61.79	10		Enugu (ENBS), Nigeria	
	61.79	10	YDK	Palembang, Indonesia	
	61.79	1	CP59	R. Cobija, Bolivia	
	61.79	1	ZYR61	R.Dif. de Taubaté, Brazil	
	61.79	1	HJFV	R. Neiva, Colombia	
	61.79	0.35	HCMA1	R. Amazonas, Ecuador	
4860	61.73	10		R. Comercial de Angola	
	61.73	5/100		R. Clube de Mozambique	
	61.73			R. Kashmir, India	
	61.73			R. Moscow, USSR	
	61.73	0.25	HIBC	Voz del Progreso, Dom. Rep	
	61.73	0.25	HCJC3	R. 18 de Nov, Ecuador	
	61.73	1	YVNK	R. Cronos, Venezuela	
4864	61.68	5	EAJ206	R. Ecuatorial, Sp. Guinea	
4865	61.66	1	CSA97	Ponta Delgada, Azores	
4865	61.66	5/100		R. Cl. de Mozambique	
	61.66	0.25		Quelimane, Mozambique	
	61.66	10		Brunei Br. Sce, Brunei	
	61.66	1	YDR	Ambon, Indonesia	
	61.66	2.5	PRC5	R.Clube do Para, Brazil	
	61.66	1	HCCD1	Luz de America, Ecuador	
4869	61.60	1	CR6RN	R. Clube de Angola, Angola	
4870	61.60	30		R. Dahomey, Dahomey	
	61.60	7.5		Colombo, Ceylon	
	61.60	0.3	HCGM7	Rio Amazonas, Ecuador	
	61.60	0.5	OCX4T	R. Cultural, Peru	
	61.60	5	YVKP	R. Tropical, Venezuela	
4873	61.56			Uralsk, USSR	
4875	61.54	0.5	HS1JS	Thai Army St, Thailand	
	61.54	5	ZYZ30	R. Jornal do Brazil, Brazil	
	61.54	2.5	HJBG	La Voz del Norte, Colombia	
4877	61.52	20		Saigon, Vietnam	
4880	61.48	7.5/10		Leopoldville, Congo Rep.	
	61.48	10		AIR Lucknow, India	
	61.48	1	HIJP	R. Comercial, Dom. Rep.	
	61.48		HCWE1	R. Nac. Espejo, Ecuador	
	61.48	1	OCX4E	R. Once Sesenta, Peru	
	61.48	5	YVKF	Ond. Populares, Venezuela	
4885	61.45	10		Nairobi, Kenya	
	61.45	1	CP77	R. Sararenda, Bolivia	
	61.45	5	ZYV50	R. Cultura de Pocos, Brazil	
	61.45		ZYG26	R. Pioneira de Teresina, Braz.	
	61.45	1	ZYC	R.dif. Rio Branco, Brazil	
	61.45	1	OAX5V	R. Villarica, Peru	
4890	61.35	25		Dakar, Senegal	
	61.35	0.1	HSVSS2	Thai Army St, Thailand	
	61.35	10	VLT/K4	Port Moresby, Australia	
	61.35	5	YVKB	R.dif. Venezuela, Venezuela	
4895	61.29	20		Paradys, So. Africa	
	61.29	7.5		AIR Kurseong, India	
	61.29	10/50		Karachi, Pakistan	
	61.29	10		Rawalpindi, Pakistan	
	61.29			Alma Ata, USSR	
	61.29	4		R. Martinique, Martinique	
	61.29	2.5	PRF6	R. Baré, Brazil	
	61.29	1	ZYN22	R. Cultura da Bahia, Brazil	
	61.29	5	HJCH	La Voz de la Victor, Colomb.	
	61.29	0.4	OAZ4T	R. Chanchamayo, Peru	
4896	61.27			Tyumen, USSR	
4900	61.22	10		Colombo, Ceylon	
	61.22	10	YDN2	Kotaradja, Indonesia	
	61.22	1	YDS	Gorontalo, Indonesia	
	61.22	1	YVQE	R. Cumaná, Venezuela	
4904	61.18	30		R. Tchad, Chad	
	61.18	0.42	HCVS6	La Voz de Sasquisili, Ecuad.	
4905	61.16	1	CR6RS	Lobito, Angola	
	61.16	100	ETLF	Addis Ababa, Ethiopia	
	61.16	0.5	HRQN3	Voz del Atlantico, Honduras	
	61.16	5	ZYZ20	R. Relogio Federal, Brazil	
	61.16	1	HJAG	Emisora Atlantico, Colomb.	
4910	61.10	18		Conakry, Guinea	
	61.10	120/240		Peking, China	
	61.10	0.3	YDM3	Bukittinggi, Indonesia	
	61.10	10/50		Karachi, Pakistan	
	61.10	1	HIN	R. HIN, Dom. Rep.	
	61.10	0.3	HCMJ1	R. Gran Colombia, Ecuador	
	61.10	0.5	OAX2K	R. Libertad, Peru	
	61.10	1	YVMK	R. Cabimas, Venezuela	
4911	61.08	2.5		Lusaka, Zambia	
4915	61.04	5		Accra, Ghana	
	61.04	10		Peshawar, Pakistan	
	61.04	10		Quetta, Pakistan	
	61.04	1	ZYR60	Cultura de Araraquara, Br.	
	61.04	2	ZYE2	R.dif. de Macapa, Brazil	
	61.04	1	ZYL20	R. Rio S. Francisco, Brazil	
4920	60.98	0.5	9UB94	R. Cordac, Burundi	
	60.98		VUM	AIR Madras, India	
	60.98	1	YDX2	Tdj. Pinang, Indonesia	
	60.98	10	VLM4	Brisbane, Australia	
	60.98	0.2	TGRY	V. San Raymundo, Guatem.	
	60.98	0.2	HCMP2	Voz de la Peninsular, Ecuad.	
	60.98	0.35	HCJX6	R. Cultural Rel, Ecuador	
	60.98	0.5	OAX2H	R. La Hora, Peru	
	60.98	1	OBX7H	R. Ondas del Titicaca, Peru	
	60.98	7.5	YVKR	R. Caracas, Venezuela	
4923	60.94	0.3	HCQR1	R. Quito, Ecuador	
4925	60.90	5/100		R. Clube de Mozambique	
	60.90	1	ZYV32	R. Industrial, Brazil	
	60.90	1	ZYA6	R. Icarema, Brazil	
4926	60.90	5	EAJ206	R. Ecuatorial, Sp. Guinea	
4930	60.85			Medan, Indonesia	
	60.85			Batumi, USSR	

kc	m	kW	Call	Stations & countries	Rem.
4930	60.85	1	HRUS	R. Catolica, Honduras	
	60.85	10	HCCR1	Casa de la Cultura, Ecuador	
	60.85	1	YVOT	R. Junin, Venezuela	
4934	60.80	10		Nairobi, Kenya	
	60.80	0.25	OAX5Q	Abancay, Peru	
4935	60.80	10/50		Karachi, Pakistan	
	60.80	1	ZYI21	R. Poti, Brazil	
	60.80	1	OAX9E	R. Tropical, Peru	
4940	60.73	25		R. Abidjan, Ivory Coast	
	60.73	0.25		Porto Amélia, Mozambique	
	60.73	10		AIR Gauhati, India	
	60.73			Kiev, USSR	
	60.73	0.2	TGRH	Rel. Humanas, Guatemala	
	60.73	0.5	4VM	R.diff. Haitienne, Haiti	
	60.73	10	HCXZ1	R.dif. Nacional, Ecuador	
	60.73	0.5	OAX6N	R. Misti, Peru	
	60.73	0.5	OAZ4R	R. San Juan, Peru	
	60.73	1	YVMO	R. Lara, Venezuela	
4945	60.67	20		Paradys, So. Africa	
	60.67	10	YDA3	Bandung, Indonesia	
	60.67	10/50		Karachi, Pakistan	
	60.67	0.5	DZB6	Nat. Teachers Coll, Philipp.	
	60.67	1	ZYO25	R. Capixaba, Brazil	
	60.67	0.25	ZYF22	R. Caixas do Sul, Brazil	
	60.67	1	ZYE23	R. Educ. Bragança, Brazil	
4950	60.60	4		Dakar, Senegal	
	60.60			Kashmir, India	
	60.60	20		R. Malaysia, Sarawak	
	60.60	0.25	HCAV3	R. Ondas Lojas, Ecuador	
	60.60	0.5	OBX7I	R. Madre de Dios, Peru	
	60.60	1	YVMM	R. Coro, Venezuela	
4955	60.54	3	CR6RZ	R. Angola, Angola	
	60.54	2	PRF7	R. Cultura de Campos, Br.	
	60.54	25	HJCQ	Inst. Nac. de Radio y TV, Col.	
	60.54	0.25	OAX5S	R. Amauta, Peru	
4957	60.52			Anadyr, USSR	
	60.52			Blagoveshchensk, USSR	
4958	60.51			Baku, USSR	
4960	60.48	10/100	VUD	AIR Delhi, India	
	60.48	1	HICN	R. Antillas, Dom. Rep.	
	60.48	1	HCPH5	R. Ruta, Ecuador	
	60.48	0.5	OAX1S	R. Lambayeque, Peru	
	60.48	1	YVQA	R. Sucre, Venezuela	
4962	60.45	10/100	VUD	AIR Delhi, India	
4965	60.42	1	CR6RE	R.Cl. de Malanje, Angola	
	60.42	10		Lusaka, Zambia	
	60.42			Sukhumi, USSR	
	60.42	2.5	HJAE	R. Santa Fé, Colombia	
4967	60.40	1/10/50		R. Kuwait, Kuwait	
4968	60.38	10		Colombo, Ceylon	
4970	60.36	5		R. Mogadiscio, Somalia	
	60.36	5	VQA52	Jesselton, Sabah	
	60.36	0.25	HCGH1	R. Tarqui, Ecuador	
	60.36	10	YVLK	R. Rumbos, Venezuela	
4972	60.33	30/4		R. Yaoundé, Cameroon	
	60.33	0.25		Quelimane, Mozambique	
4975	60.30	0.25		Nampula, Mozambique	
	60.30			Blagoveshchensk, USSR	
	60.30	1	ZYP27	R. Copacabana, Brazil	
	60.30	5/2.5	ZYV9	R. Timbira, Brazil	
4976	60.29	5/8		Kampala, Uganda	
4980	60.25	1		R. Dif. UFAC, Congo Rep.	
	60.25			Fukien, China	
	60.25	10/50		Karachi, Pakistan	
	60.25	0.25	HICK	Ondas del Yaque, Dom. R.	
	60.25	0.3	HCJC5	Ondas Azuayas, Ecuador	
	60.25	1	OBZ4Z	R. Agricultura, Peru	
	60.25	1	YVOC	Ecos del Torbes, Venezuela	
4984	60.19	0.2	CR6RB	R. Ecclesia, Angola	
4985	60.18	10		Banda Atjeh, Indonesia	
	60.18	10		R. Malaysia, Malaya	
	60.18	5	CP75	La Cruz del Sur, Bolivia	
	60.18	1.5	ZYZ5	Voz de Oeste, Brazil	
	60.18	10	HJCV	R. Independencia, Colombia	
4986	60.17	1	CR6RO	Silva Porto, Angola	
4990	60.12	20		Lagos, Nigeria	
	60.12	0.04	ZCQ3	Victoria, Seychelles	
	60.12			Hunan, China	
	60.12	10/100	VUD	AIR Delhi, India	
	60.12	10		AIR Hyderabad, India	
	60.12	1	HCSJ1	R. Javier, Ecuador	
	60.12	15	YVMQ	R. Barquisimeto, Venezuela	
4995	60.06	0.5	HRQW	R. Juventud, Honduras	
	60.06	5	ZYY2	R. Brasil Central, Brazil	
	60.06	1	OAZ4C	R. Andina, Peru	
4996	60.05			Magadan, USSR	
*5000	60.00	0.5	MSF	Teddington, Gt. Britain	

kc	m	kW	Call	Stations & countries	Rem.
*5000	60.00		HBN	Neuchatél, Switzerland	
*	60.00	20	RWM	Moscow, USSR	
*	60.00	4	ZUO	Johannesburg, So. Africa	
*	60.00	2	WWVH	Puunene, Hawaii	
*	60.00	8	WWV	Lanham, USA	
*	60.00	2	JJY	Tokyo, Japan	
*	60.00		BPV	Peking, China	
*	60.00	2	LOL	Buenos Aires, Argentina	
*	60.00	1	IAM	Rome, Italy	
*	60.00	0.3	IBF	Turin, Italy	
5005	59.94	1	OAX2S	R. Jaén, Peru	
5010	59.88	4/30		R. Garoua, Cameroon	
	59.88			Kwangsi, China	
	59.88	10		FBS, Singapore	
	59.88	1		Thai TV Co, Thailand	
	59.88	5		Grenada, Windward Isl.	
	59.88	0.5	HCAS4	Voz de los Caras, Ecuador	
	59.88	0.4	OAX8V	R. Eco, Peru	
	59.88	1	YVRW	R. Bocono, Venezuela	
5012	59.86	20		Gwelo, So.Rhodesia	
	59.86			Sukhumi, USSR	
5015	59.82	1	CR6RM	Mocamedes, Angola	
	59.82			Arkhangelsk, USSR	
	59.82			Vladivostok, USSR	
	59.82	1	PRC8	R. Guanabara, Brazil	
	59.82	0.5	HCRP1	R. Católica, Ecuador	
5020	59.76	4		R. Niger, Niger	
	59.76	7.5		Colombo, Ceylon	
	59.76	0.12	4VGS	R. Indépendence, Haiti	
	59.76	10	HJFW	Transm Caldas, Colombia	
	59.76	0.15	OAX5R	R. San Cristobal, Peru	
	59.76	10	YVKO	R. Nacional, Venezuela	
5024	59.71	1	CR6RH	R. Clube Huila, Angola	
5025	59.70	5		R. Pax, Mozambique	
	59.70	1	ZYX24	R. Dif. Aquidauana, Brazil	
	59.70	1		Voz Amazonia, Brazil	
	59.70	0.2	HCOB5	Ondas Azules, Ecuador	
	59.70	0.3	OAX7Q	R. Quillabamba, Peru	
5026	59.70	5/8		Kampala, Uganda	
5030	59.64	7.5	YDP4	Medan, Indonesia	
	59.64	1	HIBB	Voz del Papagayo, Dom. R.	
	59.64	0.5	HCPS5	Ondas Canaris, Ecuador	
	59.64	7.5	YVKM	R. Continente, Venezuela	
5033	59.61	1	CR6RW	R. Cl. de Cabinda, Angola	
5035	59.58	30		Bangui, C. African Rep.	
	59.58	7.5/10		Dacca, Pakistan	
	59.58	0.5	PRI4	R. Esp. Santo, Brazil	
	59.58	1	HJIC	La Voz del Caqueta, Col.	
	59.58		HCCU5	La Voz de Azogues, Ecuador	
	59.58	0.75	HCVC3	R. Centinela del Sur, Ecuador	
	59.58	0.5	OBX7F	R. Ayaviri, Peru	
	59.58	1	OAX6U	R. Ilo, Peru	
5040	59.52			Tbilisi, USSR	
	59.52			Fukien, China	
	59.52		ZNX20	Bridgetown, Barbados	
	59.52	1	HJNE	R. El Sol, Colombia	
	59.52	1	OBZ4P	R. Reloj, Peru	
	59.52	1	YVMA	Ecos del Zulia, Venezuela	
5041	59.51	10		Emis. da Guiné, Port. Guin.	
5042	59.50	1	CR6RF	R. Clube de Benguela, Ang.	
	59.50	0.5	OBX7J	R. Madre de Dios, Peru	
5044	59.48			Pyongyang, Korea (Dem. R.)	
	59.48	5	EAJ5	R. Ecuatorial, Sp. Guinea	
5045	59.46	0.25	ZK5	Rarotonga, Cook Isl.	
	59.46			R. Mundial, Brazil	
	59.46	1	ZYP23	R. Quitandinha, Brazil	
	59.46	0.25	HCEA5	R. Roxi, Ecuador	
5047	59.43	4/100		Lomé, Togo	
5050	59.41	1	OQ2AC	R. Collège, Congo	
	59.41	20		Dar-es-Salaam, Tanganyika	
	59.41			Petropavlovsk, USSR	
	59.41	1	OAX1J	R. Tumbes, Peru	
	59.41	2	YVKD	R. Cultura, Venezuela	
5052	59.38	20		R. Malaysia, Sarawak	
5055	59.35			Chita, USSR	
	59.35	2	ZYO23	R. Vitoria, Brazil	
	59.25	0.22	HCRI1	Centro R. Imbabura, Ecuad.	
5056	59.33	10		Addis Ababa, Ethiopia	
	59.33	1	OAZ4A	R. Tarma, Peru	
				5060–5950kc	
5060	59.29	1	CR6RD	Nova Lisboa, Angola	
	59.29	7.5		Aden, Aden	
5065	59.23			Petrozavodsk, USSR	
	59.23	10		Colombo, Ceylon	
5067	59.21	25		Ulan Bator, Mongolia	
5075	59.13	120/240		Peking, China	
	59.13	25	HJGC	Accion Cult. Popular, Col.	

kc	m	kW	Call	Stations & countries	Rem.
5090	59.00			Palana, USSR	
5095	58.88	50	HJCG	Accion Cult. Popular, Col.	
5110	58.71			Khabarovsk, USSR	
5125	58.54	15/120		Peking, China	
5137	58.00	1	CR6RV	R. Clube do Moxico, Angola	
5145	58.31	120/240		Peking, China	
5225	57.42	2	OAX2A	R. Trujillo, Peru	
5260	57.03			Alma Ata, USSR	
	57.03			Krasnoyarsk, USSR	
5287	56.75	0.33		Damascus, Syria	
5300	51.72	0.5	OAX7Z	R. Juliaca, Peru	
5320	56.40	15/120		Peking, China	
5440	55.15	1	OAX5X	R. Huancavelica, Peru	
5455	55.00			R. Moscow, USSR	
5535	54.10	15/120		Peking, China	
5680	52.78	1	OAX1O	R. Chiclayo, Peru	
5710	52.57	0.5	OAX3E	R. Huaraz, Peru	
5740	52.26			Erevan, USSR	
5807	51.67		GAY25	Rugby, Gt. Britain	
5825	51.50			Syktyvkar, USSR	
5830	51.46	0.1	OCX4R	R. Industrial, Peru	
5838	51.39	0.5	OAX7K	R. Puno, Peru	
5860	51.20	120/240		Peking, China	
5875	51.05	1	HRNL	Voz de Honduras, Honduras	
5880	51.02	100		R. Budapest, Hungary	
	51.02	120/240		Peking, China	
5900	50.84	100		R. Budapest, Hungary	
	50.84			R. Moscow, USSR	
	50.84	1	ZNB	Mafeking, Bechuanaland	
5915	50.72	15/240		Peking, China	
5920	50.68			Kwangsi, China	
	50.68			R. Moscow, USSR	
5920	50.62			Tashkent, USSR	
5930	50.59	100		Praha, Czechoslovakia	
	50.59			Arkhangelsk, USSR	
	50.59			Guryev, USSR	
	50.59	1	OAX6E	R. Continental, Peru	
5935	50.54	120/240		Peking, China	
	50.54			Tibet, China	
5940	50.51			Minsk, USSR	
	50.51			Magadan, USSR	
				5950–6200kc (49 metre band)	
5950	50.42	5/100		Warsaw, Poland	
	50.42			R. Moscow, USSR	
	50.42	120/240		Peking, China	
	50.42	25		R. Sanaa, Yemen	
	50.42			Hanoi, Vietnam (Dem. R.)	
	50.42	0.3	HCCV5	Quatro Rios, Ecuador	
	50.42	1	OAX6A	R. Arequipa, Peru	
	50.42	0.5	OAX4P	R. Huancayo, Peru	
5954	50.39	1	TIQ	R. Casino, Costa Rica	
5955	50.39	100		Allouis, France	
	50.39	0.5		Larissa, Greece	
	50.39	100		Sverdlovsk, USSR	
	50.39	10/100	VUD	AIR Delhi, India	
	50.39	5		Pakanbaru, Indonesia	
	50.39	50		R. Canada, Canada	
	50.39	5	TGNA	R. Cultural, Guatemala	
	50.39	0.5	YNRG	R. Zelaya, Nicaragua	
	50.39	1	CP5	R. Pio XII, Bolivia	
	50.39	7.5	ZYR226	R. Gazeta, Brazil	
	50.39	0.6	HCDF1	Voz del Norte, Ecuador	
5960	50.34	10/100/250		R. Free Europe, Germany	
	50.34	7.5/5		Athens, Greece	
	50.34			R. Moscow, USSR	
	50.34	50/60/100		R. Roma, Italy	
	50.34	100		Trans World Radio, Monaco	
	50.34	10		Elisabethville, Congo	
	50.34	25/100		Dakar, Senegal	
	50.34	50		Ulan Bator, Mongolia	
	50.34	1	BEP23	Taipei, Taiwan	
	50.34	1.5		Godthåb, Greenland	
	50.34	1	HRRH5	Voz de Occidente, Honduras	
	50.34	0.25	XEUMT	Mexico City, Mexico	
	50.34	1	HJCF	Voz de Bogota, Colombia	
	50.34	0.75	HCTR1	R. Equinoccial, Ecuador	
	50.34	1	OAX7L	La Voz del Altiplano, Peru	
5965	50.29	10/100/250		R. Free Europe, Germany	
	50.29	50		BBC London, Gt. Britain	
	50.29	50/60/100		R. Roma, Italy	
	50.29	50/100/200		Delano, USA	
	50.29	100		AFRTS, Los Angeles, USA	
	50.29	50/250/500		Greenville, USA	
	50.29	0.5	HRVW2	Voz de Centro America,Hon.	
	50.29	0.5	YNWW	R. Sport, Nicaragua	
	50.29	7.5	ZYU60	R. Guiaba, Brazil	
	50.29	0.2	HCGE5	R. Mundial, Ecuador	

kc	m	kW	Call	Stations & countries	Rem.
5970	50.25			R. Berlin Int, Germ. (DDR)	
	50.25	10/100/250		R. Free Europe, Germany	
	50.25	100		Tashkent, USSR	
	50.25	4		R. Brazzaville, Congo	
	50.25	120/240		Peking, China	
	50.25	1	YDO2	Bandjarmasin, Indonesia	
	50.25	7.5/10		Dacca, Pakistan	
	50.25	10		Quetta, Pakistan	
	50.25	1	DZCA	NCDA, Philippines	
	50.25	50		R. Canada, Canada	
	50.25	0.2	TGMZ	R. Nacional, Guatemala	
	50.25	1	HJKA	R. Horizonte, Colombia	
	50.25	0.5	HCMH6	R. Cotopaxi, Ecuador	
	50.25	10	OBX4Q	R. El Sol, Peru	
5975	50.21	15/100		BBC, London, Gt. Britain	
	50.21	35		Thessaloniki (VOA), Greece	
	50.21	10		Gwelo, So. Rhodesia	
	50.21	25		Dakar, Senegal	
	50.21	10/100	VUD	AIR Delhi, India	
	50.21	10	HLK22	Seoul, Korea	
	50.21	35/100		Okinawa (VOA), Ryukyu Isl.	
	50.21	100		Honolulu (VOA), Hawaii	
	50.21	50/250/500		Greenville, USA	
	50.21	1.5	CP44	R. Nacional LAB, Bolivia	
	50.21	10	ZYT44	R. Guaruja, Brazil	
	50.21	1	CE597	Emis. Pres. Balmaceda,Chile	
	50.21	3	ZPA6	R. Guaira, Paraguay	
5980	50.17	100	DMQ5	Deutsche Welle, Germany	
	50.17	50/100		R. Nederland, Holland	
	50.17	5		Freetown, Sierra Leone	
	50.17	100		Beyrouth, Lebanon	
	50.17	7.5/10		Dacca, Pakistan	
	50.17	10/50		Karachi, Pakistan	
	50.17	100		Tbilisi, USSR	
	50.17	100		Vladivostok, USSR	
	50.17	3.5	BED30	Taipei (BCC), Taiwan	
	50.17	1.5		Godthåb, Greenland	
	50.17	1	TGAR	R. Quetzal, Guatemala	
	50.17	2	ZFY	R. Demerara, Br. Guiana	
	50.17	1	HJLY	La Voz del Rio Grande, Col.	
	50.17	5	OBX4M	R. Panamericana, Peru	
5984	50.14	1		R. Buea, Cameroon	
5985	50.13	10/100/250		R. Free Europe, Germany	
	50.13	50/100		R. Nederland, Holland	
	50.13	50/60/100		R. Roma, Italy	
	50.13	25/100		Vatican Radio	
	50.13	120/240		Peking, China	
	50.13	10/100	VUD	AIR Delhi, India	
	50.13	1.5	BEC37	Taipei, Taiwan	
	50.13	50/100/200		Dixon, USA	
	50.13	7.5	4VB	R. Commerce, Haiti	
	50.13	1	LRS2	R. Splendid, Argentina	
5990	50.08	10/100/250		R. Free Europe, Germany	
	50.08	75		BBC, London, Gt. Britain	
	50.08	100/150		R. Bucharest, Rumania	
	50.08	100		Hörby, Sweden	
	50.08	50		Irkutsk, USSR	
	50.08	120/240		Peking, China	
	50.08	10/100	VUD	AIR Delhi, India	
	50.08	10		AIR Bhopal, India	
	50.08	10	YDS2	Menado, Indonesia	
	50.08	10/50		Karachi, Pakistan	
	50.08	10		Peshawar, Pakistan	
	50.08	22.5		R. Malaysia, Singapore	
	50.08	50		R. Canada, Canada	
	50.08	5	TGJA	R. Nuevo Mundo, Guatem.	
	50.08	7.5	PRL5	R. Educacão, Brazil	
5993	50.05	10		R. Coquilhatville, Congo	
5994	50.04	4		R. Martinique, Martinique	
5995	50.04	25		R. Andorra, Andorra	
	50.04	35/50/100		Tanger (VOA), Morocco	
	50.04	10/100	VUD	AIR Delhi, India	
	50.04	7.5/10		Dacca, Pakistan	
	50.04	50/250/500		Greenville, USA	
	50.04	1	HRP1	Eco de Honduras, Honduras	
	50.04	1	HOM5O	Circuito RPC, Panama	
	50.04	1	CP41	R. Loyola, Bolivia	
	50.04	1	HJFQ	Voz del Pueblo, Colombia	
	50.04	3	OAX4V	R. America, Peru	
6000	50.00	1/50	OEI20	Aldrans, Austria	
	50.00	120/240		Peking, China	
	50.00	1	TGTA	R. Sonora, Guatemala	
	50.00	7.5		R. Americas, Swan Isl.	
	50.00	25	PRK5	R. Inconfidencia, Brazil	
	50.00		CE600	R. El Carbon, Chile	
	50.00	1	OAX7E	R. Nac. Puno, Peru	
	50.00	5	CXA2	R. Sur, Uruguay	

kc	m	kW	Call	Stations & countries	Rem.
6000	50.00	1	YVNL	R. Miranda, Venezuela	
6003	49.97	0.5		Tripolis, Greece	
6005	49.96	20/100		Berlin (RIAS), Germany	
	49.96	5/100		Warsaw, Poland	
	49.96	20		Blagoveshchensk, USSR	
	49.96	20		Paradys, So. Africa	
	49.96	3.5		R. Zanzibar, Zanzibar	
	49.96	0.3		Nagoya, Japan	
	49.96	0.6		Matsuyama, Japan	
	49.96	0.075	CFCX	Montreal, Canada	
6006	49.95	1	TIHBG	R. Reloj, Costa Rica	
6010	49.92	15/100		BBC, London, Gt. Britain	
	49.92	50/60/100		R. Roma, Italy	
	49.92	50		Murmansk, USSR	
	49.92	0.25/10	VUC	AIR Calcutta, India	
	49.92	35/100		Okinawa (VOA), Ryukyu Isl.	
	49.92	1	CJCX	Sydney, Canada	
	49.92	2.5	XEOI	R. Mil, Mexico	
	49.92	5	YSS	R. Nacional, El Salvador	
	49.92	1	CE601	Emisoras Norte, Chile	
	49.92	1	HJFK	La Voz Amiga, Colombia	
	49.92	3	OAX4Q	R. Victoria, Peru	
6015	49.88	10/100/250		R. Free Europe, Germany	
	49.88	100	DMQ6	Deutsche Welle, Germany	
	49.88	50		Rhodes (VOA), Greece	
	49.88	50	HLK31	Seoul, Korea	
	49.88	7.5/10		Dacca, Pakistan	
	49.88	50/80	WRUL	R. New York, USA	
	49.88	0.75	4VEB	R. Caraibes, Haiti	
	49.88	5	PRA8	R. Cl. de Pernambuco, Br.	
	49.88	0.5	HCEB4	R. Manta, Ecuador	
	49.88	1	ZPA10	R. Paraguay, Paraguay	
6020	49.83	10/100/250		R. Free Europe, Germany	
	49.83	10		R. Nederland, Holland	
	49.83	50		Khabarovsk, USSR	
	49.83	35/50/100		Tanger (VOA), Morocco	
	49.83	20		Gwelo, So. Rhodesia	
	49.83	3		Amman, Jordan	
	49.83	1	TGDA	La Voz de Occidente, Guat.	
	49.83	1	HROW2	R. Monserrat, Honduras	
	49.83	0.25	XEUW	El Eco de Sotavento, Mexico	
	49.83	1	CE602	Diego Portales, Chile	
6025	49.79	10/100/250		R. Free Europe, Germany	
	49.79	50/100		R. Nederland, Holland	
	49.79	10/100	CSA52	R. Nacional, Portugal	
	49.79	10	CR6RZ	R. Angola, Angola	
	49.79	0.5	CR4AA	R. Cl. Cabo Verde	
	49.79	0.3		Van, Turkey	
	49.79	120/240		Peking, China	
	49.79	5		R. Malaysia, Malaya	
	49.79	1		Lahore, Pakistan	
	49.79	0.1	HIHD	R. Oriente, Dom. Rep.	
	49.79	5	YNX	R. Equis, Nicaragua	
	49.79	10	ZYR63	R. Em. de Piratininga, Br.	
	49.79	3	ZPA1	R. Nacional, Paraguay	
6028	49.77	1	OAX8B	R. Nac. Iquitos, Peru	
6030	49.75	20		Mühlacker (SDR), Germany	
	49.75	50		Simferopol, USSR	
	49.75	50		Ashkabad, USSR	
	49.75	4		R. Moanda-Franceville, Gab.	
	49.75	100		Baghdad, Iraq	
	49.75	1		Lahore, Pakistan	
	49.75	2	DZH6	Call of Orient, Philipp.	
	49.75	0.1	CFVP	Calgary, Canada	
	49.75	50/250/500		Greenville, USA	
	49.75	5	TGTQ	R. Internacional, Guatemala	
	49.75	0.25	HP5B	R. Cadena Miramar, Pan.	
	49.75	1	HJZI	Inst. Nac. de Radio y TV,C.	
6035	49.71	15/100		BBC, London, Gt. Britain	
	49.71	50/100		R. Nederland, Holland	
	49.71	30		R. Monte-Carlo, Monaco	
	49.71	50		Tashkent, USSR	
	49.71	50/250		Monrovia (VOA), Liberia	
	49.71	30		R. Mauritania, Mauritania	
	49.71	120/240		Peking, China	
	49.71	50	XZK3	Rangoon, Burma	
	49.71	10/50		Karachi, Pakistan	
	49.71	7.5/10		Dacca, Pakistan	
	49.71	1.5	HRTL	R. Tegucigalpa, Honduras	
	49.71	10	ZYZ26	R. Globo, Brazil	
	49.71	0.5	HCNK3	R. Cariamanga, Ecuador	
	49.71	1	CXA30	R. Nacional, Uruguay	
6037	49.69	0.3	TIFC	Faro del Caribe, Costa Rica	
6038	49.69	0.5	OAX6B	R. Landa, Peru	
6040	49.67	100		Munich (VOA), Germany	
	49.67	4/30		R. Yaounde, Cameron	
	49.67	35/50/100		Tanger (VOA), Morocco	

kc	m	kW	Call	Stations & countries	Rem.
6040	49.67	10/100	VUD	AIR Delhi, India	
	49.67	7.5	BED9	Taipei (BCC), Taiwan	
	49.67	0.5	TGCO	Voz del Tropico, Guatemala	
	49.67	0.5	YNLUA	Radio City, Nicaragua	
	49.67	0.25	CE604	R. Libertad, Chile	
	49.67	10	HJCB	Voz del Tolima, Colombia	
6045	49.63	5		Athens (FBS), Greece	
	49.63	4		Ouagadougou, Upper Volta	
	49.63	100	YDF	Djakarta, Indonesia	
	49.63	0.25	XEXQOC	R. Universidad, Mexico	
	49.63	1	HOU31	Voz del Baru, Panama	
	49.63	7.5	ZYS33	R. Clube Pernambuco, Braz.	
	49.63	1	CXA61	El Espectador, Uruguay	
6050	49.59			R. Berlin Int., Germ. (DDR)	
	49.59	50/250		BBC, London, Gt. Britain	
	49.59	100		Chita, USSR	
	49.59	100	ETLF	Addis Ababa, Ethiopia	
	49.59	5/100		R. Clube de Mozambique	
	49.59	1	HRLP3	R. America, Honduras	
	49.59	30	HCJB	La Voz de los Andes, Ecuad.	
	49.59	2.5	OBZ4O	R. Arzobispado, Peru	
6055	49.55	20/50		R. Liberty, Germany	
	49.55	50		Petrozavodsk, USSR	
	49.55	10/50	JOZ2	Tokyo, Japan	
	49.55	10/100		R. Kuwait, Kuwait	
	49.55	0.25	DYH4	Dumaguete City, Philipp.	
	49.55	2	VTW2	Tarawa, Gilbert Isl.	
	49.55	50/250/500		Greenville, USA	
	49.55	0.5	YNTP	R. Puerto, Nicaragua	
	49.55	1	CP18	R. El Condor, Bolivia	
	49.55	10	PRB21	R. Panamericana, Brazil	
	49.55	5	HJEX	R. Pacifico, Colombia	
	49.55	5	CXA53	La Voz de Melo, Uruguay	
6058	49.51	5		Kigali, Rwanda	
6060	49.50	50/60/100		R. Roma, Italy	
	49.50			Caltanisetta, Italy	
	49.50	4		R. Niger, Niger	
	49.50	20		Lusaka, Zambia	
	49.50	10/100		R. Habana, Cuba	
	49.50	0.5	HIAZ	R. Santiago, Dom. Rep.	
	49.50	1	TGRLA	R. Cadena Landivar, Guat.	
	49.50	0.3	HRYN4	Voz del Merendon, Honduras	
	49.50	50	LRA31	Buenos Aires, Argentina	
	49.50	0.75	HCAC1	Voz de Democracia, Ecuad.	
6062	49.48	2		Bangkok, Thailand	
	49.48	1	OAX8L	R. Telesar, Peru	
6065	49.46	100		Hörby, Sweden	
	49.46	50		Ashkhabad, USSR	
	49.46	15/240		Peking, China	
	49.46	10/100	VUD	AIR Delhi, India	
	49.46	1		Lahore, Pakistan	
	49.46	35/100		Poro (VOA), Philipp.	
	49.46	110		Bethany, USA	
	49.46	1	XEXG	R. dif. Mexico, Mexico	
	49.46	0.6	YNEQ	R. Universal, Nicaragua	
	49.46	10	PRL8	R. Nac. Brasilia, Brazil	
	49.46	7.5	ZYZ31	R. Rural, Brazil	
	49.46	0.2	HCEM1	Ondas Carchenses, Ecuador	
6070	49.42	10/100/250		R. Free Europe, Germany	
	49.42	15/100		BBC, London, Gt. Britain	
	49.42	120		R. Sofia, Bulgaria	
	49.42	100		Accra, Ghana	
	49.42	4		Ziguinchor, Senegal	
	49.42	5		Kotabaru, Indonesia	
	49.42	10/50		Karachi, Pakistan	
	49.42	7.5/10		Dacca, Pakistan	
	49.42	1	HSK5	R. Thailand, Thailand	
	49.42	1	CFRX	Toronto, Canada	
	49.42	0.4	TGPA	R. Palmeras, Guatemala	
	49.42	5	CE607	Soc. Nac. de Mineria, Chile	
	49.42	0.5	HCIW5	R. El Mercurio, Ecuador	
	49.42	0.3	OAX4S	Onda Popular, Peru	
6075	49.38	100	DMQ6	Deutsche Welle, Germany	
	49.38	7.5/5		Athens, Greece	
	49.38	50/250		Monrovia (VOA), Liberia	
	49.38	7.5		Colombo, Ceylon	
	49.38	10/50		Karachi, Pakistan	
	49.38	7.5/10		Dacca, Pakistan	
	49.38	1		Lahore, Pakistan	
	49.38	35/100		Okinawa (VOA), Ryukyu Isl.	
	49.38	1	TISRHB2	R. Popular, Costa Rica	
	49.38	0.25	HIDB	R. Libertad, Dom. Rep.	
	49.38	0.15	4VCP	LV du Nord, Haiti	
	49.38	0.6	HRMH5	La Voz del Junco, Honduras	
	49.38	10	HJGT	Acción Cult. Popular, Col.	
	49.38	2.5	CXA3	R. Ariel, Uruguay	
6080	49.34			R. Berlin Int, Germ. (DDR)	

kc	m	kW	Call	Stations & countries	Rem.
6080	49.34	10/100/250		R. Free Europe, Germany	
	49.34	15/100		BBC, London, Gt. Britain	
	49.34	10	CSB51	R. Cl. Portuguese, Portugal	
	49.34	100		Schwarzenburg, Switzerland	
	49.34	10		Stanleyville, Congo	
	49.34	35/100		Tanger (VOA), Morocco	
	49.34	120/240		Peking, China	
	49.34	20/200		R. Japan, Japan	
	49.34	7.5	ZL7	Wellington, New Zealand	
	49.34	0.25	DZI7	Voice of Manila, Philipp.	
	49.34	0.1	CFKX	Vancouver, Canada	
	49.34	0.5	TGSM	R. Nac. S. Marcos, Guatem.	
	49.34	1	4VHW	R. Haiti, Haiti	
	49.34		HCDG2	R. Bolivar, Ecuador	
6082	49.32	10	OAX4Z	R. Nacional Lima, Peru	
6085	49.30	10	DMR24	Munich (BR), Germany	
	49.30	50/100		R. Nederland, Holland	
	49.30	100		Kiev, USSR	
	49.30			Tallinn, USSR	
	49.30	0.5		Izmir, Turkey	
	49.30	50/200		Dixon, USA	
	49.30	0.5	YNRS	Ondas Populares, Nicaragua	
	49.30	15	ZYK2	R. Jornal do Comercio, Br.	
	49.30	1	HJDX	Ecos de Pasto, Colombia	
6090	49.26	50		R. Luxembourg, Luxemb.	
	49.26	50		Khabarovsk, USSR	
	49.26	50		Simferopol, USSR	
	49.26	10	ELBC	Liberian Bc. Corp., Liberia	
	49.26	10		R. Kaduna, Nigeria	
	49.26	15		R. Cambodge, Cambodia	
	49.26	7.5/10		Dacca, Pakistan	
	49.26	3	BEC26	Taipei, Taiwan	
	49.26	2	VLI6	Sydney, Australia	
	49.26	7.5	HISD	R. Sto. Domingo, Dom. R.	
	49.26	1	YSKL	R. Cadena YSKL, El Salv.	
	49.26	2	TGDZ	R. Centroamericana, Guat.	
	49.26	0.5	HRNO4	R. Morazan, Honduras Rep.	
	49.26	1	XECMT	R. Mante, Mexico	
	49.26	40	LRY1	R. Belgrano, Argentina	
	49.26	0.5	HCVM6	R. Once de Nov, Ecuador	
6095	49.22	10/100/250		R. Free Europe, Germany	
	49.22	35		Thessaloniki, Greece	
	49.22	20		Paradys, So. Africa	
	49.22	100		Baghdad, Iraq	
	49.22	50	BED29	Chiayi (BCC), Taiwan	
	49.22	50/200		Delano, USA	
	49.22	50	DL2	AFRTS, Los Angeles, USA	
	49.22	25	ZYB7	R. Dif. de São Paulo, Brazil	
	49.22	1	HJIQ	La Voz del Llano, Colombia	
	49.22	0.3	HCPT5	Ondas del P. Socorro, Ecuad.	
6096	49.20	1	HSK5	R. Thailand, Thailand	
6100	49.18	100	DMQ6	Deutsche Welle, Germany	
	49.18	100		R. Belgrade, Yugoslavia	
	49.18	50		Kursk, USSR	
	49.18	20		Irkutsk, USSR	
	49.18	15/120		Peking, China	
	49.18	7.5		AIR Kurseong, India	
	49.18	0.25	4VU	R. Lumière, Haiti	
	49.18	0.5	YNHC	R. Her. Cordoba, Nicaragua	
	49.18	1	CE610	R. Calama, Chile	
	49.18	1	HCSP4	Voz del Volante, Ecuador	
6105	49.14	10/100/250		R. Free Europe, Germany	
	49.14	100		Schwarzenburg, Switzerland	
	49.14	100		Voice of Malaysia, Malaya	
	49.14	7.5	BEC61	Air Force St, Taiwan	
	49.14	0.25	XEQM	Merida, Mexico	
	49.14	5	ZYN6	Ceará R. Clube, Brazil	
	49.14	1	HJNB	R. Vision, Colombia	
	49.14	1	OAX6F	R. Nac. Tacna, Peru	
6110	49.10	75		BBC, London, Gt. Britain	
	49.10	35/100		Poro (VOA), Philipp.	
	49.10	7.5/100		BBC, Singapore	
	49.10	1	HIZ	Broadc. Nacional, Dom. R.	
	49.10	0.5	TGQA	R. Nacional, Guatemala	
	49.10	0.5	HRXW2	R. Comayagüela, Honduras	
	49.10	5	CE611	Soc. Nac. de Agricult, Chile	
	49.10	1	ZPA11	R. Charitas, Paraguay	
	49.10	10	YVPN	Esc. Radiofonicas, Venezu.	
6112	49.08	7.5/10		Dacca, Pakistan	
6115	49.06	20		R. Berlin Int, Germ. (DDR)	
	49.06	50		Khabarovsk, USSR	
	49.06	50		Riga, USSR	
	49.06	1		R. Douala, Cameroon	
	49.06	5/100		R. Club de Mozambique	
	49.06	35/50/100		Tanger (VOA), Morocco	
	49.06	1	XEUDS	R. Univ. de Sonora, Mexico	
	49.06	50	ZYC7	R. Tupi, Brazil	
6115	49.06	1	OBX4Z	R. Luz, Peru	
	49.06	0.3	OAX4H	R. Mundial, Peru	
	49.06	1	CXA73	R. Clarin, Uruguay	
6116	49.06	5		Dalat, Vietnam	
6120	49.02	15	OIX7	Pori, Finland	
	49.02	10/100/250		R. Free Europe, Germany	
	49.02	15/100		BBC, London, Gt. Britain	
	49.02	100		Schwarzenburg, Switzerland	
	49.02	35/50/100		Tanger (VOA), Morocco	
	49.02	120/240		Peking, China	
	49.02	1	YDI4	Surabaja, Indonesia	
	49.02	7.5/10		Dacca, Pakistan	
	49.02	10		Peshawar, Pakistan	
	49.02	50		Call of Orient, Philipp.	
	49.02	0.5	HICB	R. dif. HICB, Dom. Rep.	
	49.02		4VE	R. St. 4VEH, Haiti	
	49.02	0.5	XETS	R. XETS, Mexico	
	49.02	0.5	YNCA	R. Atlantico, Nicaragua	
	49.02	10	LRX1	R. El Mundo, Argentina	
	49.02		HCRL2	Quinta Piedad, Ecuador	
6125	48.98	10/100/250		R. Free Europe, Germany	
	48.98	20/50		R. Liberty, Germany	
	48.98	15/100		BBC, London, Gt. Britain	
	48.98	10		Kaunas, USSR	
	48.98	10		R. Luluabourg, Congo Rep.	
	48.98	50		R. Tunis, Tunis	
	48.98	120/240		Peking, China	
	48.98	100		Honolulu (VOA), Hawaii	
	48.98	50/250/500		Greenville, USA	
	48.98	1	HRQ4	R. Suyapa, Honduras	
	48.98	1.5	CP15	El Condor, La Paz, Bolivia	
	48.98	7.5	PRG9	R. Nac. de S. Paulo, Brazil	
	48.98	1	HJKE	R. Continental, Colombia	
	48.98	10	CXA4	S.O.D.R.E, Uruguay	
6130	48.94	10/100/250		R. Free Europe, Germany	
	48.94	0.2/100	LKJ	R. Norway, Norway	
	48.94	100		R. Nacional, Spain	
	48.94	50		Kalatch, USSR	
	48.94	7.5		Colombo, Ceylon	
	48.94	10		AIR Gauhati, India	
	48.94	10/100	VUD	AIR Delhi, India	
	48.94	10		R. Lao, Laos	
	48.94	0.5	CHNX	Halifax, Canada	
	48.94	1.5	YNI	R. dif. León, Nicaragua	
	48.94	1.5	HCFB2	R. Condor, Ecuador	
6135	48.90	100		Praha, Czechoslovakia	
	48.90	5/100		Warsaw, Poland	
	48.90	50		Krasnoyarsk, USSR	
	48.90	1	CR6RU	Carmona, Angola	
	48.90	4		Tananarive, Malagasy Rep.	
	48.90	120/240		Peking, China	
	48.90	1	YDY2	Samarinda, Indonesia	
	48.90	0.6		Kumamoto, Japan	
	48.90	10		R. Malaysia, Malaya	
	48.90	25		Ulan Bator, Mongolia	
	48.90	4		Papéete, Tahiti	
	48.90	0.9	HRME2	Voz del Patio, Honduras	
	48.90	0.5	CP18	R. Prefectura, Bolivia	
	48.90	7.5	PRC21	R. Soc. Gaucha, Brazil	
	48.90	10	CE613	Concepción, Chile	
	48.90	0.5	OCX4M	R. Pasco, Peru	
6138	48.90	1		Lahore, Pakistan	
6140	48.86	20/100	ORU	Wavre, Belgium	
	48.86	10/100/250		R. Free Europe, Germany	
	48.86	50/100		R. Nacional, Spain	
	48.86	1		R. Tripoli, Libya	
	48.86	10/100	VUD	AIR Delhi, India	
	48.86	20/200		R. Japan, Japan	
	48.86	10/50		Karachi, Pakistan	
	48.86	10	VLW6	Perth, Australia	
	48.86	1	TGHC	R. Universal, Guatemala	
	48.86	0.25	XERUU	R. Univ. Chihuahua, Mexico	
	48.86	0.5	YNWA	R. Mundial, Nicaragua	
	48.86	1	HCOV5	Ondas del Volante, Ecuador	
	48.86		OAX9B	R. Amazonas, Peru	
	48.86	10	CXA20	R. Monte Carlo, Uruguay	
6141	48.85			Pyongyang, Korea (Dem. R.)	
6145	48.82	100		Allouis, France	
	48.82	100	DMQ6	Deutsche Welle, Germany	
	48.82	2.5/5		Enugu (NBC), Nigeria	
	48.82	120/240		Peking, China	
	48.82	10/100	VUD	AIR Delhi, India	
	48.82	50/200		Dixon, USA	
	48.82	0.3	HRXN4	R. Estrella, Honduras	
	48.82	50	PRL9	R. Nacional Rio, Brazil	
	48.82	1	HJED	Voz del Cauca, Colombia	
6150	48.78	15/100		BBC, London, Gt. Britain	

kc	m	kW	Call	Stations & countries	Rem.
6150	48.78	100		R. Bucharest, Rumania	
	48.78	100		R. Belgrade, Yugoslavia	
	48.78	1		R. Cl. Benguela, Angola	
	48.78	20		Paradys, So. Africa	
	48.78	120/240		Peking, China	
	48.78	10/100	VUD	AIR Delhi, India	
	48.78	10	VLR6	Melbourne, Australia	
	48.78	0.5	TGAZ *	R. Continental, Guatemala	
	48.78	1	YNMV	R. Continental, Nicaragua	
	48.78	0.3	HCEM4	R. Costa Azul, Ecuador	
	48.78	2	OBX4G	R. Excelsior, Peru	
6155	48.74	1/50	OEI21	Vienna, Austria	
	48.74	3	CSB2	R. Renascenca, Portugal	
	48.74	50		Lvov, USSR	
	48.74	18		Conakry, Guinea	
	48.74	4/100		Lomé, Togo	
	48.74			Kansu, China	
	48.74	15/240		Peking, China	
	48.74	5		R. Täbriz, Iran	
	48.74	50		Baghdad, Iraq	
	48.74	10		Tokyo (FEN), Japan	
	48.74	50/80	WRUL	R. New York, USA	
	48.74	0.25	4VWA	R. Citadelle, Haiti	
	48.74	1	HRUC	R. Centro, Honduras	
	48.74	1	CP12	R. Fides, Bolivia	
	48.74	10	CXA12	R. Carve, Uruguay	
6160	48.70	100	DMQ6	Deutsche Welle, Germany	
	48.70	10/100/250		R. Free Europe, Germany	
	48.70			R. Berlin Int, Germ. (Dem. R.)	
	48.70			Vladivostok, USSR	
	48.70	50		Algier 3, Algeria	
	48.70	7.5/50		Malolos (VOA), Philipp.	
	48.70	1	HSK4	R. Thailand, Thailand	
	48.70	0.5	CBUX	Vancouver, Canada	
	48.70	0.3	CBNX	St. John's, Canada	
	48.70	0.25	TGZA	R. Club, Guatemala	
	48.70	10	HJKJ	Nueva Granada, Colombia	
	48.70	1	OCX4G	R. Mundo, Peru	
6165	48.66	15/100		BBC, London, Gt. Britain	
	48.66	100		Schwarzenburg, Switzerland	
	48.66	15		Khabarovsk, USSR	
	48.66	100		Kiev, USSR	
	48.66	30		R. Tchad, Chad	
	48.66	10		Lusaka, Zambia	
	48.66	20		Damascus, Syria	
	48.66	20		Saigon, Vietnam	
	48.66	1	HRTW4	R. Hondureña, Honduras	
	48.66	10	XEWW	Voz America Latina, Mexico	
	48.66	7.5	ZYR58	R. Dif. São Paulo, Brazil	
6170	48.62	50		R. Sofia, Bulgaria	
	48.62	25/50		R. Liberty, Germany	
	48.62	15/100		BBC, London, Gt. Britain	
	48.62	15		Novosibirsk, USSR	
	48.62	4		Tananarive, Malagasy Rep.	
	48.62	120/240		Peking, China	
	48.62	10		AIR Lucknow, India	
	48.62	10	DUH2	Philipp. Br. Sce, Philipp.	
	48.62	35/100		Okinawa (VOA), Ryukyu Isl.	
	48.62	1		R. Cayenne, Fr. Guiana	
	48.62	0.25	HCPJ2	R. Fluminense, Ecuador	
	48.62	1	OAX1N	R. Progreso, Peru	
	48.62	0.3	OBX4N	R. Corporación, Peru	
	48.62	1	CXA21	R. Fenix, Uruguay	
	48.62	10	YVKO	R. Nacional, Venezuela	
6175	48.58	7.5/5		Athens, Greece	
	48.58	100		Allouis, France	
	48.58	2		Malaga, (RNE), Spain	
	48.58	120		Kazan, USSR	
	48.58	20		Kaduna (NBC), Nigeria	
	48.58	0.9		Tokyo, Japan	
	48.58	0.6		Hiroshima, Japan	
	48.58	50		R. Malaysia, Singapore	
	48.58	10		R. Guarani, Brazil	
	48.58	0.3	OAX7C	R. Tahuantisuyo, Peru	
6176	48.57			Shensi, China	
6178	48.55	0.2	4VSC	R. St. Marc, Haiti	
6180	48.54	15/100		BBC, London, Gt. Britain	
	48.54	50		Orenburg, USSR	
	48.54	35/50/100		Tanger (VOA), Morocco	
	48.54	120/240		Peking, China	
	48.54	10/100	VUD	AIR Delhi, India	
	48.54	1	TGWB	Voz de Guatemala, Guatem.	
	48.54	10	LRA34	R. Nac. Mendoza, Argent.	
	48.54	25	HJCT	Inst. Nac. de Radio y TV, Col.	
	48.54	0.45	HCRT6	R. Paz y Bien, Ecuador	
6185	48.50	10/100/250		R. Free Europe, Germany	
	48.50	0.2	LLI	R. Norway, Norway	

kc	m	kW	Call	Stations & countries	Rem.
6185	48.50	100	CSA29	R. Nacional, Portugal	
	48.50	10		Addis Ababa, Ethiopia	
	48.50	10		Ibadan (WNBS), Nigeria	
	48.50	10		Colombo, Ceylon	
	48.50	7.5/50		Malolos (VOA), Philipp.	
	48.50	35/100		Poro (VOA), Philipp.	
	48.50	50/200		Delano, USA	
	48.50	0.5	HRMT4	R. Molino Rojo, Honduras	
	48.50	1	XEIOM	Inst. Fed. de Capacit, Mex.	
	48.50	1	CP9	R. Amauta, Bolivia	
	48.50	10	ZYR77	R. Bandeirantes, Brazil	
6190	48.47	10		R. Bremen, Germany	
	48.57	100		Bucharest, Rumania	
	48.47	25/100		Vatican Radio	
	48.47	50		Sebaa-Aioun, Morocco	
	48.47	10/100	VUD	AIR Delhi, India	
	48.47	0.3		Osaka, Japan	
	48.47	0.3		Sendai, Japan	
	48.47	50/250/500		Greenville, USA	
	48.47	0.1	HIAU	Broadc. Tropical, Dom. Rep.	
	48.47	0.5	TGFP	Flores Peten, Guatemala	
	48.47	0.25	YNUW	R. Dario, Nicaragua	
	48.47	10	CE619	R. Corporación, Chile	
	48.47	0.4	OAX4G	R. Lima, Peru	
6195	48.43	50/100		BBC, London, Gt. Britain	
	48.43	50		Baku, USSR	
	48.43	10		R. Burundi, Burundi	
	48.43			Pyongyang, Korea (Dem. R.)	
	48.43	0.5	HRD2	Voz Atlantida, Honduras	
	48.43	10	PRD21	Emis. Continental, Brazil	
	48.43	1	HJEZ	Voz de Cali, Colombia	
	48.43	1.5	HC6SPT	R. Cosmopolita, Ecuador	
	48.43	0.5	OAZ4E	R. Mineria, Peru	
6198	48.40	0.25	OAX1B	R. Piura, Peru	
6200	48.39			R. Moscow, USSR	
	48.39	120/240		Peking, China	
	48.39	1	YNJM	R. Norte, Nicaragua	
	48.39	1	OAX7A	R. Cuzco, Peru	
				6210–7100k	
6210	48.31	120/240		Peking, China	
6212	48.29	15/120		Peking, China	
6215	48.27	1	TIGPH	R. Monumental, Costa Rica	
6225	48.19	15/120		Peking, China	
6234	48.10	100		R. Budapest, Hungary	
6235	48.10	10/50		Karachi, Pakistan	
	48.10	1	OAX6U	R. Universidad, Peru	
6240	48.08	5		S. Isabel, Sp. Guinea	
6245	48.04	10/50		Karachi, Pakistan	
6250	48.00			Pyongyang, Korea (Dem. R.)	
6260	47.92			Chinghai, China	
6270	47.87	120/240		Peking, China	
6280	47.77			Sinkiang, China	
6290	47.70	120/240		Peking, China	
6299	47.62	1		Istanbul, Turkey	
6300	47.62	1	OBX4P	R. Miraflores, Peru	
6305	47.58	1		R. des Vallées, Andorra	
6325	47.43	120/240		Peking, China	
6345	47.28	1.6		Santa Isabel, Sp. Guinea	
	47.28	120/240		Peking, China	
6350	47.24			Pyongyang, Korea (Dem. R.)	
6400	46.81	120/240		Peking, China	
6500	46.16			Chinghai, China	
6520	46.00	0.4		R. Gorgan, Iran	
6595	45.48	15/120		Peking, China	
6600	45.45			Pyongyang, Korea (Dem. R.)	
6660	45.04	0.2		R. Kukësi, Albania	
6700	44.78	0.3	OAX1A	R. Delcar, Peru	
6770	44.31			Alma Ata, USSR	
6780	44.25			Khabarovsk, USSR	
6790	44.18	15/120		Peking, China	
6810	44.05	15/120		Peking, China	
6818	44.01	0.4		R. Sanandaj, Iran	
6825	43.96	120/240		Peking, China	
	43.96			Tashkent, USSR	
6840	43.85			Inner Mongolia, China	
6850	43.80	0.35		Pathfinders St, Poland	
6860	43.72	120/240		Peking, China	
6870	43.64			Alma Ata, USSR	
6890	43.54	15/120		Peking, China	
6937	43.25			Yunnan, China	
6955	43.13	120/240		Peking, China	
6974	43.02			Inner Mongolia, China	
**6985	42.95		GIC26	Hailsham, Gt. Britain	
6995	42.89	15/120		Peking, China	
7000	42.86	1		R. Atlantico, Canary Isl.	
7010	42.80	10/50		Karachi, Pakistan	
7018	42.74	0.5		Istanbul, Turkey	

kc	m	kW	Call	Stations & countries	Rem.
7020	42.72	7.5/10		Dacca, Pakistan	
7035	42.64	120/240		Peking, China	
7050	42.55	50/100		Cairo, Un. Arab. Rep.	
	42.55			Sinkiang, China	
7060	42.49	120/240		Peking, China	
7065	42.46	15/120		Peking, China	
7075	42.40	50/100		Cairo, Un. Arab Rep.	
7080	42.37	120/240		Peking, China	
7090	42.30	50		R. Tirana, Albania	
7095	42.28	120/240		Peking, China	
7096	42.27	10/50		Karachi, Pakistan	
				7100–7300 kc (41 m. b.)	
7100	42.25	15/120		Peking, China	
	42.25	1.6		Istanbul, Turkey	
	42.25			R. Moscow, USSR	
7105	42.22	10/100/250		R. Free Europe, Germany	
	42.22	100		R. Nacional, Spain	
	42.22	4/50		R. Brazzaville, Congo	
	42.22	10/100	VUD	AIR Delhi, India	
	42.22	7.5	YDJ2	Jogjarkarta, Indonesia	
	42.22	5		R. Nepal, Nepal	
	42.22	1		Thai TV Co., Thailand	
7110	42.19	75		BBC, London, Gt. Britain	
	42.19	50/100		R. Nederland, Holland	
	42.19	100		Schwarzenburg, Switzerl.	
	42.19	50		Tula, USSR	
	42.19	5/8		Kampala, Uganda	
	42.19	35		Colombo (VOA), Ceylon	
	42.19	10		Rawalpindi, Pakistan	
	42.19	10		Quetta, Pakistan	
	42.19	7.5/100		BBC, Singapore	
7115	42.16	100		Praha, Czechoslovakia	
	42.16	0.5	CR6RE	R. Cl. de Malanje, Angola	
	42.16	10		Sebaa Aioun, Morocco	
	42.16	0.25		Porto Amélia, Mozambique	
	42.16	120/240		Peking, China	
	42.16	10/100	VUD	AIR Delhi, India	
	42.16	100		Voice of Malaysia, Malaya	
7120	42.13	75		BBC, London, Gt. Britain	
	42.13	100		R. Budapest, Hungary	
	42.13	50		Erevan, USSR	
	42.13	100	ETLF	Addis Ababa, Ethiopia	
	42.13	50	XZK4	Rangoon, Burma	
	42.13	10/100	VUB	AIR Bombay, India	
	42.13	7.5/100		BBC, Singapore	
7125	42.11	10	DMQ7	Deutsche Welle, Germany	
	42.11	5/100		Warsaw, Poland	
	42.11	15		Pathfinders St., Poland	
	42.11	50		Erevan, USSR	
	42.11	18		Conakry, Guinea (Rep.)	
	42.11	5		Nairobi, Kenya	
	42.11	120/240		Peking, China	
	42.11	10/100	VUD	AIR Delhi, India	
	42.11	100		R. Iran, Iran	
	42.11	25	BED92	Taipei (BCC), Taiwan	
7130	42.08	50		Rhodes (VOA), Greece	
	42.08	15/100		BBC, London, Gt. Britain	
	42.08	100	CSA55	R. Nacional, Portugal	
	42.08	100		Minsk, USSR	
	42.08	10		R. dif. Congolaise, Congo (R.)	
	42.08	10/50		Karachi, Pakistan	
	42.08	10		Peshawar, Pakistan	
	42.08	50	BED7	Taipei (BCC), Taiwan	
7135	42.05	15/100		BBC, London, Gt. Britain	
	42.05	30		R. Monte-Carlo, Monaco	
	42.05	35/50/100		Tanger (VOA), Morocco	
	42.05	4		R. Niger, Niger	
	42.05	120/240		Peking, China	
	42.05	7.5/50		Malolos (VOA), Philipp.	
	42.05	35/100		Poro (VOA), Philipp.	
	42.05	7.5/100		BBC, Singapore	
7140	42.02	20/100	ORU	Wavre, Belgium	
	42.02	10/100/250		R. Free Europe, Germany	
	42.02	75		BBC, London, Gt. Britain	
	42.02	7.5/5		Athens, Greece	
	42.02	50		Riga, USSR	
	42.02	50		Alma Ata, USSR	
	42.02	0.25	CR6RA	R. Clube de Angola, Ang.	
	42.02	0.25		Quelimane, Mozambique	
	42.02	10/100	VUD	AIR Delhi, India	
	42.02	10		AIR, Hyderabad, India	
	42.02	1	YDR2	Ambon, Indonesia	
	42.02	7.5/10		Dacca, Pakistan	
7145	41.99	10/100/250		R. Free, Europe, Germany	
	41.99	5/100		Warsaw, Poland	
	41.99	100	ETLF	Addis Ababa, Ethiopia	
	41.99	18		R. Mali, Mali	

kc	m	kW	Call	Stations & countries	Rem.
7145	41.99	1		R. Lao, Laos	
	41.99	7.5/50		Malolos (VOA), Philipp.	
7150	41.96	100	DMQ7	Deutsche Welle, Germany	
	41.96	15/100		BBC, London, Gt. Britain	
	41.96	0.3		Jannina, Greece	
	41.96	50		Serpukhov, USSR	
	41.96	10		R. Comercial de Angola	
	41.96	5		Nairobi, Kenya	
	41.96	5		R. Mogadiscio, Somali Rep.	
	41.96	120/240		Peking, China	
	41.96	7.5/100		Dacca, Pakistan	
	41.96	3	BED35	Taipei (BCC), Taiwan	
7151	41.95	0.5		Serrai, Greece	
7155	41.92	10/100/250		R. Free Europe, Germany	
	41.92	15/100		BBC, London, Gt. Britain	
	41.92	4		Tananarive, Malagasy Rep.	
	41.92	10/100	VUD	AIR Delhi, India	
	41.92	100		Amman, Jordan	
	41.92	35/100		Okinawa (VOA), Ryuk. I.	
7160	41.90	100		Allouis, France	
	41.90	50		Lvov, USSR	
	41.90	1		R. Cl. Benguela, Angola	
	41.90	1	CR6RD	Nova Lisboa, Angola	
	41.90	0.25		Quelimane, Mozambique	
	41.90	0.5		Santa Isabel, Sp. Guinea	
	41.90	120/240		Peking, China	
	41.90	10	VUM	AIR Madras, India	
	41.90	10/50		Karachi, Pakistan	
	41.90	1	DUH9	R. University, Philipp.	
	41.90	20		R. Malaysia, Sarawak	
7165	41.87	10/100/250		R. Free Europe, Germany	
	41.87	50/100		R. Nederland, Holland	
	41.87	20		Dar-es-Salaam, Tanganyika	
	41.87	10/100	VUD	AIR Delhi, India	
	41.87			Djakarta, Indonesia	
7170	41.84	50		Tashkent, USSR	
	41.84	50		Vladivostok, USSR	
	41.84	10		R. dif. Congolaise, Congo R.	
	41.84	35/50/100		Tanger (VOA), Morocco	
	41.84	15/120		Peking, China	
	41.84	10/100	VUD	AIR Delhi, India	
	41.84	4		Noumea, New Caledonia	
	41.84	50		Jeddah, Saudi Arabia	
	41.84	22.5		R. Malaysia, Singapore	
7175	41.81	10/100/250		R. Free Europe, Germany	
	41.81			Caltanisetta, Italy	
	41.81	15		Starobelsk, USSR	
	41.81	1	CR6RS	Lobito, Angola	
	41.81	25		R. TV Congol, Congo R.	
	41.81	2.5		Gwelo, So. Rhodesia	
	41.81	35/100		Poro (VOA), Ph lipp.	
7180	41.78	10/100/250		R. Free Europe, Germany	
	41.78	25/50		R. Liberty, Germany	
	41.78	50		Riazan, USSR	
	41.78	120/240		Peking, China	
	41.78	10/100	VUD	AIR Delhi, India	
	41.78	100		Baghdad, Iraq	
	41.78	0.5	BEG20	Taipei, Taiwan	
7185	41.75	75		BBC, London, Gt. Britain	
	41.75	50		Blagovechensk, USSR	
	41.75	50		Sverdlovsk, USSR	
	41.75	20		Paradys, So. Africa	
	41.75	1	HSK7	R. Thailand, Thailand	
7189	41.73	20	4XB49	Tel Aviv, Israel	
7190	41.72	10/100/250		R. Free Europe, Germany	
	41.72	0.25		Em. Reg. do. Norte, Moz.	
	41.72	10		Colombo, Ceylon	
	41.72	10		Kotabaru, Indonesia	
	41.72	1	YDX3	Tdj. Pinang, Indonesia	
	41.72	1	HLK30	Seoul, Korea	
	41.72	10/50/100		R. Australia, Australia	
7195	41.70	10/100/250		R. Free Europe, Germany	
	41.70	100		Bucharest, Rumania	
	41.70	50		Tula, USSR	
	41.70	50/250		Monrovia (VOA), Liberia	
	41.70	5/8		Kampala, Uganda	
	41.70	15/120		Peking, China	
	41.70	10/100	VUD	AIR Delhi, India	
	41.70	20/200		R. Japan, Japan	
7200	41.67	15/100		BBC, London, Gt. Britain	
	41.67	50		R. Belgrade, Yugoslavia	
	41.67	1	OQ2AC	R. Collège, Congo	
	41.67	120/240		Peking, China	
	41.67	10		R. Malaysia, Malaya	
7205	41.64	20/100	ORU	Wavre, Belgium	
	41.64	100	DMQ7	Deutsche Welle, Germany	
	41.64	10/100/250		R. Free Europe, Germany	

kc	m	kW	Call	Stations & countries	Rem.
7205	41.64	35		Thessaloniki (VOA), Greece	
	41.64	5	CR7RB	R. Pax, Mozambique	
	41.64	120/240		Peking, China	
7210	41.61	10/100/250		R. Free Europe, Germany	
	41.61	75		BBC, London, Gt. Britain	
	41.61	50/100		R. Nederland, Holland	
	41.61	10		Tromsö, Norway	
	41.61	100		Hörby, Sweden	
	41.61	25/100		Schwarzenburg, Switzerland	
	41.61	50		Irkutsk, USSR	
	41.61	10		Nairobi, Kenya	
	41.61	120/240		Peking, China	
	41.61	0.25/10	VUC	AIR Calcutta, India	
	41.61	5	YDH3	Semarang, Indonesia	
7215	41.58	25/50		R. Liberty, Germany	
	41.58	0.5		Kozani (FBS), Greece	
	41.58	15/100		R. Budapest, Hungary	
	41.58	25		R. Abidjan, Ivory Coast	
	41.58	1		AFRTS, Taiwan	
7220	41.55	75		BBC, London, Gt. Britain	
	41.55	100		Schwarzenburg, Switzerland	
	41.55	50		Stanislav, USSR	
	41.55	30		Bangui, C. Africa Eep.	
	41.55	10		Lusaka, Zambia	
	41.55	100	YDF5	Djakarta, Indonesia	
	41.55	10		Voice of Malaysia, Malaya	
	41.55	50		Riyadh, Saudi Arabia	
	41.55	10/50/100		R. Australia, Australia	
7225	41.52	10/100/250		R. Free Europe, Germany	
	41.52	100		Bucharest, Rumania	
	41.52	10		Sebaa Aioun, Morocco	
	41.52	0.6		Kigali, Rwanda	
	41.52			Szechuan, China	
	41.52	10/100	VUD	AIR Delhi, India	
	41.52			Pyongyang, Korea (Dem. R.)	
	41.52	1		Lahore, Pakistan	
	41.52	7.5/10		Dacca, Pakistan	
	41.52	35/100		Poro (VOA), Philipp.	
7230	41.49	75		BBC, London, Gt. Britain	
	41.49	0.5	CR6RM	R. Cl. de Moçamedes, Ang.	
	41.49	20		Paradys, So. Africa	
	41.49	120/240		Peking, China	
	41.49	1		Biak, Indonesia	
	41.49	10	JOZ6	Tokyo, Japan	
	41.49	2/50	DZI9	Call of the Orient, Philipp.	
7235	41.47	10/100/250		R. Free Europe, Germany	
	41.47	50/60/100		R. Roma, Italy	
	41.47	10/100	VUD	AIR Delhi, India	
	41.47	35/100		Okinawa (VOA), Ryukyu Is.	
7240	41.44	50		BBC, London, Gt. Britain	
	41.44	100		Allouis, France	
	41.44	50		Tula, USSR	
	41.44	50		R. Belgrade, Yugoslavia	
	41.44	4/30		R. Garoua, Cameroon	
	41.44	10		Nairobi, Kenya	
	41.44	15/120		Peking, China	
	41.44	10/100	VUD	AIR Delhi, India	
	41.44	20	YDP3	Medan, Indonesia	
	41.44	1.5	BEC28	Taipei, Taiwan	
7245	41.41	1/50	OEI33	Vienna, Austria	
	41.41	10/100/250		R. Free Europe, Germany	
	41.41	4		R. Mauritania, Mauritan.	
	41.41	35/50/100		Tanger (VOA), Morocco	
	41.41	4		St. Denis, Reunion	
	41.41	20		Saigon, Vietnam	
7250	41.38	35/100		Vatican Radio	
	41.38	35/50/100		Tanger (VOA), Morocco	
	41.38	7.5/10		Dacca, Pakistan	
	41.38	22.5		R. Malaysia, Singapore	
	41.38	10	BED21	Taipei (BCC), Taiwan	
7255	41.35	120		R. Sofia, Bulgaria	
	41.35	100	DMQ7	Deutsche Welle, Germany	
	41.35	10/100/250		R. Free Europe, Germany	
	41.35	20/50		R. Liberty, Germany	
	41.35	100		Kiev, USSR	
	41.35	0.3		Beira, Mozambique	
	41.35	50		Lagos, Nigeria	
	41.35	10/100	VUD	AIR Delhi, India	
	41.35	20	YDJ4	Jogjakarta, Indonesia	
	41.35	25	BED51	Taipei (BCC), Taiwan	
7260	41.32	75		BBC, London, Gt. Britain	
	41.32	100		Trans World Radio, Mon.	
	41.32	4		Dzaoudzi, Comores Isl.	
	41.32	10/100	VUD	AIR Delhi, India	
	41.32	7.5/100		BBC, Singapore	
	41.32	3.5	BEC71	Air Force St, Taiwan	
7265	41.29	1.5		Bodenseesender (SWF), Ger.	

kc	m	kW	Call	Stations & countries	Rem.
7265	41.29	50		Riazan, USSR	
	41.29	50/250		Monrovia (VOA), Liberia	
	41.29	15/240		Peking, China	
	41.29	5		Saigon, Vietnam	
7270	41.27	4		R. Gabon, Gabon	
	41.27	35/100		Tanger (VOA), Morocco	
	41.27	20		Paradys, So. Africa	
	41.27	120/240		Peking, China	
	41.27	7.5	YDB3	Djakarta, Indonesia	
	41.27	10/50		Karachi, Pakistan	
	41.27	1		Lahore, Pakistan	
	41.27	20		R. Malaysia, Sarawak	
	41.27	1.5	BEC34	Taipei, Taiwan	
7275	41.24	100	DMQ7	Deutsche Welle, Germany	
	41.24	50/60/100		R. Roma, Italy	
	41.24	10		Lagos, Nigeria	
	41.24	20		Paradys, So. Africa	
	41.24	35		Colombo (VOA), Ceylon	
	41.24	10/50		Karachi, Pakistan	
	41.24	7.5/50		Malolos (VOA), Philipp.	
	41.24	35/100		Poro (VOA), Philipp.	
7280	41.21	10/100		Allouis, France	
	41.21	100	DMQ7	Deutsche Welle, Germany	
	41.21	75		BBC, London, Gt. Britain	
	41.21	15		Komsomolsk, USSR	
	41.21	1	CR6RD	Nova Lisboa, Angola	
	41.21	4		Tananarive, Malagasy Rep.	
	41.21	18		R. Mali, Mali	
	41.21	10		Dar-es-Salaam, Tangan.	
	41.21	10		R. Malaysia, Malaya	
	41.21	10/50		Karachi, Pakistan	
	41.21	0.5	DXH2	Mindanao Br, Philipp.	
	41.21	1.5	BEC24	Taipei, Taiwan	
7283	41.20	1	CR6RO	R. Cl. do Bie, Angola	
7285	41.18	10/100/250		R. Free Europe, Germany	
	41.18	5/100		Warsaw, Poland	
	41.18	0.2	CR6RP	Novo Redondo, Angola	
	41.18	10		Ibadan (NBC), Nigeria	
	41.18	100	TAS	R. Ankara, Turkey	
7290	41.15	50/60/100		R. Roma, Italy	
	41.15	50		Tbilisi, USSR	
	41.15	10		Addis Ababa, Ethiopia	
	41.15	5		Kisumu, Kenya	
	41.15	10/100	VUD	AIR Delhi, India	
	41.15	10/50		Karachi, Pakistan	
7295	41.12	7.5/5		Athens, Greece	
	41.12	50		R. Sofia, Bulgaria	
	41.12	10/100/250		R. Free Europe, Germany	
	41.12	20/50		R. Liberty, Germany	
	41.12	25/100		Vatican Radio	
	41.12	10		R. Bakwanga, Congo Rep.	
	41.12	10		Accra, Ghana	
	41.12	120/240		Peking, China	
	41.12	20		Makassar, Indonesia	
	41.12	10/50		Karachi, Pakistan	
7300	41.09			R. Berlin Int, Germ. (DDR)	
	41.09			Syktyvar, USSR	
	41.09	120/240		Peking, China	
7305	41.07	100		R. Budapest, Hungary	
	41.07	15/120		Peking, China	
7306	41.06	0.45		Pathfinders St, Poland	
7309	41.05	1	HSK9	R. Thailand, Thailand	
				7310–9500 kc	
7310	41.04	100		R. Budapest, Hungary	
7315	41.01			R. Berlin Int., Germ. (DDR)	
	41.01	120/240		Peking, China	
7320	40.98	15/100		BBC, London, Gt. Britain	
7324	40.96			Kansu, China	
7325	40.96	15/100		BBC, London, Gt. Britain	
	40.96	120/240		Peking, China	
7330	40.93			Dushanbe, USSR	
7335	40.90	120/240		Peking, China	
**	40.90	3		Dominion Obs., Canada	
7345	40.85	100		Praha, Czechoslovakia	
	40.85	0.35		S. Cruz de la Palma, C. Isl.	
7350	40.82			R. Moscow, USSR	
	40.82	120/240		Peking, China	
7370	40.71	15/240		Peking, China	
7385	40.62			Sinkiang, China	
7390	40.60	7.5		Damascus, Syria	
**7397	40.56		G1C27	Hailsham, Gt. Britain	
7440	40.42			R. Moscow, USSR	
7443	40.31	25		UN Geneva, Switzerland	
7450	40.27	120/240		Peking, China	
7375	40.13			Petropavlovsk, USSR	
7480	40.08	240		Peking, China	
7500	40.00	15/100		Peking, China	

kc	m	kW	Call	Stations & countries	Rem.
7547	39.71		ZNX32	Bridgetown, Barbados	
7540	39.80			Hanoi, Vietnam (Dem. R.)	
7620	39.37	15/120		Peking, China	
7650	39.33	1		Erzurum, Turkey	
7670	39.11	15		R. Sofia, Bulgaria	
7700	38.96	0.33		Damascus, Syria	
7850	38.22	50		Tirana, Albania	
7888	33.40	0.4		R. Isfahan, Iran	
7935	37.81	20	PSL	Agencia Nacional, Brazil	
7940	37.78	1.2		R. Alicante, Spain	
8215	36.52	0.2		R. Shkodra, Albania	
9009	33.03	7.5/50	4XB31	Tel Aviv, Israel	
9020	33.26	15/120		Peking, China	
9064	33.09	15/120		Peking, China	
9170	32.72	15/120		Peking, China	
9250	32.43			Alma Ata, USSR	
9295	32.28	2.5		R. dif. Seguranca, Brazil	
9340	32.12	15/120		Peking, China	
**9350	32.09		GCI29	Hailsham, Gt. Britain	
	32.09	1	OAX6D	R. Continental, Peru	
9360	32.04	50/100		R. Nacional, Spain	
9365	32.04			Inner Mongolia, China	
9370	32.02	100		R. Nacional, Spain	
9375	32.00			Khabarovsk, USSR	
9380	31.98			Alma Ata, USSR	
9390	31.95	5	OAX4J	R. La Crónica, Peru	
	31.95			R. Tirana, Albania	
9400	31.92	5		R. Atlantico, Canary Isl.	
9410	31.88	15/100		BBC, London, Gt. Britain	
9412	31.87	1	OAX4W	R. América, Peru	
9457	31.73	120/240		Peking, China	
9470	31.68			R. Moscow, USSR	
	31.68			Sinkiang, China	
9472	31.67			Inner Mongolia, China	
9475	31.66	50/100		Cairo, Un. Arab. Rep.	
9480	31.65	50		Komsomolsk, USSR	
	31.65	120/240		Peking, China	
9490	31.62			Baku, USSR	
	31.62	120/240		Peking, China	
	31.62			Tibet, China	
9495	31.60	50/100		Cairo, Un. Arab. Rep.	
				9500–9775 kc (31 metre band)	
9500	31.58			Magadan, USSR	
	31.58			Chinghai, China	
	31.58	120/240		Peking, China	
	31.58	1	CE950	Corp. Chilena Bc, Chile	
	31.58	0.25	OAX6H	R. Tacna, Peru	
9504	31.56	1	OAX8E	R. Loreto, Peru	
9505	31.56	100		Praha, Czechoslovakia	
	31.56	10/100/250		R. Free Europe, Germany	
	31.56	10		R. Belgrade, Yugoslavia	
	31.56	1	CR6RB	R. Cl. de Benguela, Angola	
	31.56	20/200		R. Japan, Japan	
	31.56	50	DZH7	Call of the Orient, Philipp.	
	31.56	50	HISD	R. St. Domingo, Dom. R.	
	31.56	5	CP38	R. Altiplano, Bolivia	
	31.56	7.5/50	PRB22	R. Record, Brazil	
9508	31.55	7.5/20		Omdurman, Sudan	
9510	31.55	75		BBC, London, Gt. Britain	
	31.55	100		Bucharest, Rumania	
	31.55	50		Kazan, USSR	
	31.55	50		Alger I, Algeria	
	31.55	120/240		Peking, China	
	31.55	15	YVXJ	R. Barquisimeto, Venezuela	
9515	31.53	20/100	ORU	Wavre, Belgium	
	31.53	50/60/100		R. Roma, Italy	
	31.53			Caltanisetta, Italy	
	31.53	1	CR6RM	Mocamedes, Angola	
	31.53	10		R. Malaysia, Malaya	
	31.53	20	TAT	R. Ankara, Turkey	
	31.53	10	XEWW	Voz de la Am. Latina, Mex.	
	31.53	1	PRD5	R. Roquete Pinto, Brazil	
	31.53	10	CXA71	R. Sarandi, Uruguay	
9520	31.51	50	OZF5	R. Denmark, Denmark	
	31.51	50/250		Monrovia (VOA), Liberia	
	31.51	10/100	VUD	AIR Delhi, India	
	31.51	10	VLT9	Port Moresby, New Guinea	
	31.51	7.5	ZL18	R. New Zealand, New Zeal.	
	31.51	50/100/200		Delano, USA	
	31.51	50/250/500		Greenville, USA	
9525	31.50	1/50	OEI49	Vienna, Austria	
	31.50	15/100		BBC, London, Gt. Britain	
	31.50	50/100		R. Nederland, Holland	
	31.50	5/100		Warsaw, Poland	
	31.50	20		Paradys, So. Africa	
	31.50	20/200		R. Japan, Japan	
	31.50	10/100		R. Habana, Cuba	

kc	m	kW	Call	Stations & countries	Rem.
9525	31.50	50/250/500		Greenville, USA	
9530	31.48	100	DMQ9	Deutsche Welle, Germany	
	31.48			R. Berlin Int, Germ. (DDR)	
	31.48			R. Moscow, USSR	
	31.48	10/100	VUD	AIR Delhi, India	
	31.48	20/200		R. Japan, Japan	
	31.48	100		Amman, Jordan	
	31.48	35/100		Poro (VOA), Philipp.	
	31.48	110		Bethany, USA	
	31.48	1	OAX6L	R. Nac. Tacna, Peru	
	31.48	1	YVMX	Maracaibo, Venezuela	
9535	31.46	100		Schwarzenburg, Switzerl.	
	31.46	10/100	VUD	AIR Delhi, India	
9540	31.45	5/100		Warsaw, Poland	
	31.45	100		R. Budapest, Hungary	
	31.45	50		Petropavlovsk, USSR	
	31.45	20		Elisabethville, Congo Rep.	
	31.45	10/50/100		R. Australia, Australia	
	31.45	7.5	ZL2	R. New Zealand, New Zeal.	
	31.45	7.5	4VC	R. Commerce, Haiti	
	31.45	50/250/500		Greenville, USA	
	31.45	0.5	OAX8I	R. La Hora, Peru	
9545	31.43	100	DMQ9	Deutsche Welle, Germany	
	31.43	100		Munich (VOA), Germany	
	31.43	100		Accra, Ghana	
	31.43	100		Beyrouth, Lebanon	
	31.43	10/50		Karachi, Pakistan	
	31.43	1	YSV	Voz Comercio, El Salvador	
	31.43	0.25	XEFT	La Voz de Vera Cruz, Mex.	
	31.43	50/200		Dixon, USA	
	31.43	7.5	ZYS43	R. Emis. Paranaense, Braz.	
	31.43	0.5	OAX4K	R. Central, Peru	
9550	31.41			R. Berlin Int, Germ. (DDR)	
	31.41	0.2/100	LLD	R. Norway, Norway	
	31.41	10		Tromsö, Norway	
	31.41	10		R. Comercial de Angola	
	31.41	120/240		Peking, China	
	31.41	20	YDQ2	Makassar, Indonesia	
	31.41	1	YDS	Menado, Indonesia	
	31.41	0.9		Tokyo, Japan	
	31.41	5		Grenada, Winward Isl.	
	31.41	50/80	WRUL	R. New York, USA	
	31.41	1	CE955	R. Valentin Letelier, Chile	
	31.41	2.5	OAX1Z	R. Nac. Tumbes, Peru	
9555	31.40	15	OIX2	Pori, Finland	
	31.40	50		BBC, London, Gt. Britain	
	31.40	120/240		Peking, China	
	31.40	50		Baghdad, Iraq	
	31.40	20		Damascus, Syria	
	31.40	5	YSS	R. Nacional, El Salvador	
	31.40	0.5	XETT	La Hora Exacta, Mexico	
	31.40	10	CP6	R. Illimani, Bolivia	
9560	31.38	50		R. Sofia, Bulgaria	
	31.38	100		Allouis, France	
	31.38			R. Berlin Int, Germ. (DDR)	
	31.38	50		Orenburg, USSR	
	31.38	10		R. Commercial de Angola	
	31.38	100		Amman, Jordan	
	31.38	10/50		Karachi, Pakistan	
	31.38	35/100		Poro (VOA), Philipp.	
	31.38	7.5/100		BBC, Singapore	
	31.38	10	BED41	Taipei (BCC), Taiwan	
9562	31.37	40	OAX4R	R. Nacional Lima, Peru	
9565	31.36	20/50		R. Liberty, Germany	
	31.36	35/50/100		Tanger (VOA), Morocco	
	31.36	50/250/500		Greenville, USA	
	31.36	15	ZYK3	R. Jornal do Comercio, Br.	
9570	31.35	100		Allouis, France	
	31.35	100		Bucharest, Rumania	
	31.35	50		Riazan, USSR	
	31.35	15/240		Peking, China	
	31.35	10/50/100		R. Australia, Australia	
	31.35	1	OAX7F	R. Nac. Puno, Peru	
	31.35	1	YVOM	San Cristobal, Venezuela	
9575	31.33	100	DMQ9	Deutsche Welle, Germany	
	31.33	50/60/100		R. Roma, Italy	
	31.33	10/100	VUD	AIR Delhi, India	
	31.33	10	ZYZ27	R. Maryrink Veiga, Brazil	
9577	31.33	0.4	OAX8Q	R. Pucallpa, Peru	
9580	31.32	75		BBC, London, Gt. Britain	
	31.32	50		Kazan, USSR	
	31.32	20/200		R. Japan, Japan	
	31.32	7.5/50		Malolos (VOA), Philipp.	
	31.32	7.5/100		BBC, Singapore	
	31.32	10/50/100		R. Australia, Australia	
9585	31.30	100		Allouis, France	
	31.30	50/60/100		R. Roma, Italy	

kc	m	kW	Call	Stations & countries	Rem.
9585	31.30	120/240		Peking, China	
	31.30	50	YDF6	Djakarta, Indonesia	
	31.30	7.5	ZYR56	R. Excelsior, Brazil	
	31.30	0.75	OBX4K	R. Selecta, Peru	
9590	31.28	50		Rhodes (VOA), Greece	
	31.28	50/100		R. Nederland, Holland	
	31.28	100		Bucharest, Rumania	
	31.28	50		Starobelsk, USSR	
	31.28	120/240		Peking, China	
	31.28	35/100		Poro (VOA), Philipp.	
	31.28	10		R. Malaysia, Singapore	
	31.28	50		R. St. KGEI, USA	
	31.28	50/250/500		Greenville, USA	
	31.28	1	OAX5C	R. Ica, Peru	
9595	31.27	10/100/250		R. Free Europe, Germany	
	31.27	25/50		R. Liberty, Germany	
	31.27	100		Schwarzenburg, Switzerl.	
	31.27	50/100		Cairo, Un. Arab. Rep.	
	31.27	120/240		Peking, China	
	31.27	10/50	JOZ3	Tokyo, Japan	
	31.27	10/50		Karachi, Pakistan	
	31.27	10	ZYN29	R. Cult. da Bahia, Brazil	
	31.27	10	CXA72	R. Monte Carlo, Uruguay	
9600	31.25	20/100	ORU	Wavre, Belgium	
	31.25			R. Berlin Int, Germ. (DDR)	
	31.25	75		BBC, London, Gt. Britain	
	31.25	50		Tashkent, USSR	
	31.25	120/240		Peking, China	
	31.25	10/100	VUD	AIR Delhi, India	
	31.25	10/50		Karachi, Pakistan	
	31.25	10		Peshawar, Pakistan	
	31.25	10/50/100		R. Australia, Australia	
	31.25	0.25	XEYU	Universidad Nac, Mexico	
	31.25	10	CE960	R. Pres. Balmaceda, Chile	
	31.25			R. Ayacucho, Peru	
9605	31.23	10/100/250		R. Free Europe, Germany	
	31.23	100	DMQ9	Deutsche Welle, Germany	
	31.23	7.5/5		Athens, Greece	
	31.23	50		Serpukhov, USSR	
	31.23	20/200		R. Japan, Japan	
	31.23	7.5/10		Dacca, Pakistan	
	31.23	7.5/50		Malolos (VOA), Philipp.	
	31.23	5	CP22	R. Prefectura, Bolivia	
9610	31.22	100	DMQ9	Deutsche Welle, Germany	
	31.22	50		BBC, London, Gt. Britain	
	31.22	0.2/100	LLG	R. Norway, Norway	
	31.22	50		Tula, USSR	
	31.22	10		Addis Ababa, Ethiopia	
	31.22	30		R. Mauritania, Maurit.	
	31.22	10/50	VLW/X9	Perth, Australia	
	31.22	2	HRZN	Voz de Suyapa, Honduras	
	31.22	10	ZYC8	R. Tupi, Brazil	
	31.22	1	OAX8C	R. Nac. Iquitos, Peru	
9612	31.21	1	CR6RI	R. Diamang, Angola	
9614	31.20	10/50		Karachi, Pakistan	
9615	31.20			R. Berlin Int, Germ. (DDR)	
	31.20	15/100		BBC, London, Gt. Britain	
	31.20	100		R. Nacional, Spain	
	31.20	50		Jiguli, USSR	
	31.20	4		R. Tchad, Chad	
	31.20	35/50/100		Tanger (VOA), Morocco	
	31.20	100		Tanger, Morocco	
	31.20	10/100	VUD	AIR Delhi, India	
	31.20	7.5/10		Dacca, Pakistan	
	31.20	35/100		Poro (VOA), Philipp.	
	31.20	3	TIRICA	Voz de la Victor, Costa R.	
9618	31.19	0.4	OBX7E	R. El Sol, Peru	
9620	31.19	100		Allouis, France	
	31.19	100		Trans World Radio, Mon.	
	31.19	100		Hörby, Sweden	
	31.19	10		R. Belgrade, Yugoslavia	
	31.19	15/120		Peking, China	
	31.19	50		Saigon, Vietnam	
	31.19	50/80	WRUL	R. New York, USA	
	31.19	10	ZYR96	R. 9 de Julho, Brazil	
	31.19	20	CXA6	S.O.D.R.E., Uruguay	
9625	31.17	20/100	ORU	Wavre, Belgium	
	31.17	75		BBC, London, Gt. Britain	
	31.17	50		R. dif. Congol., Congo R.	
	31.17	50		R. Canada, Canada	
	31.17	50/250/500		Greenville, USA	
	31.17	1	OAX8K	R. Atlantida, Peru	
9630	31.15	50/100		R. Nederland, Holland	
	31.15	50/60/100		R. Roma, Italy	
	31.15	100		Trans World Radio, Mon.	
	31.15	50		Serpukhov, USSR	
	31.15	20		Irkutsk, USSR	

kc	m	kW	Call	Stations & countries	Rem.
9630	31.15	25/100		Vatican Radio	
	31.15	1	CR6RL	R. Cl. de Angola, Angola	
	31.15	10/100	VUD	AIR Delhi, India	
	31.15	10/50		Karachi, Pakistan	
	31.15	75/100	DYH5	Dumaguete City, Philipp.	
	31.15	3	BED33	Chiayi (BCC), Taiwan	
	31.15	50		R. Canada, Canada	
9635	31.14	75		BBC, London, Gt. Britain	
	31.14	50/100	CSA23	R. Nacional, Portugal	
	31.14	50		Vladivostok, USSR	
	31.14	50		R. Kabul, Afghanistan	
	31.14	50		Baghdad, Iraq	
	31.14	50		Voice of Malaysia, Malaya	
	31.14	50/250/500		Greenville, USA	
	31.14	0.25	4VVU	R. Lumière, Haiti	
	31.14	7.5	ZYR83	R. Aparecida, Brazil	
	31.14	10	ZYR64	R. Piratininga, Brazil	
	31.14	1	OCX4K	R. Expreso, Peru	
9640	31.12	100	DMQ9	Deutsche Welle, Germany	
	31.12	75		BBC, London, Gt. Britain	
	31.12	20	TFJ	Reykjavik, Iceland	
	31.12	50/100		R. Nacional España, Spain	
	31.12	50		Alma Ata, USSR	
	31.12	10		Accra, Ghana	
	31.12	50	HLK5	Seoul, Korea	
	31.12	10/50		Karachi, Pakistan	
	31.12	50/250/500		Greenville, USA	
	31.12	50/80	WRUL	R. New York, USA	
	31.12	2.5	YVPG	Ecos del Torbes, Venezuela	
	31.12	10	YVSC	R. Nacional, Venezuela	
9645	31.10	15/100		BBC, London, Gt. Britain	
	31.10	0.2/100	LLK	R. Norway, Norway	
	31.10	50/100	CSA56	R. Nacional, Portugal	
	31.10	25/100		Vatican Radio	
	31.10	10/50		Karachi, Pakistan	
	31.10	7.5/10		Dacca, Pakistan	
	31.10	1		Lahore, Pakistan	
	31.10	1	TIFC	Faro del Caribe, Costa Rica	
	31.10	7.5	ZYV40	R. Cultura de Pocos, Brazil	
	31.10	1	OAX1T	R. Grau, Peru	
9650	31.09	15/100		BBC, London, Gt. Britain	
	31.09	50		Conakry, Guinea Rep.	
	31.09	20		Paradys, So. Africa	
	31.09	120/240		Peking, China	
	31.09	100		Honolulu (VOA), Hawaii	
	31.09	110		Bethany, USA	
	31.09	1	CE965	R. Yungay, Chile	
9655	31.07	10/100/250		R. Free Europe, Germany	
	31.07	100		Schwarzenburg, Switzerland	
	31.07	10		Kaduna (NBC), Nigeria	
	31.07	35/100		Poro (VOA), Philippines	
	31.07	100		R. Habana, Cuba	
9660	31.06	20/100	ORU	Wavre, Belgium	
	31.06	20/50		R. Liberty, Germany	
	31.06	15/100		BBC, London, Gt. Britain	
	31.06	100		Minsk, USSR	
	31.06	50		R. dif. Congol, Congo Rep.	
	31.06	120/240		Peking, China	
	31.06	10	VLQ9	Brisbane, Australia	
	31.06	7	LRX	R. El. Mundo, Argentina	
9665	31.04	100		Schwarzenburg, Switzerland	
	31.04	50		Stanislav, USSR	
	31.04	1	CR6RD	Nova Lisboa, Angola	
	31.04	120/240		Peking, China	
	31.04	10/100	VUD	AIR Delhi, India	
	31.04	7.5/50		Malolos (VOA), Philipp.	
	31.04	50/200		Dixon, USA	
	31.04	10	PRL8	R. Nac. Brasilia, Brazil	
	31.04			R. Rio, Brazil	
	31.04	1	OAX8U	R. Eco, Peru	
9667	31.03	100		Colombo, Ceylon	
9670	31.02	10/100/250		R. Free Europe, Germany	
	31.02	100		Schwarzenburg, Switzerland	
	31.02			R. Moscow, USSR	
	31.02	15/120		Peking, China	
	31.02	100		Jeddah, Saudi Arabia	
	31.02	5		Hué, Vietnam	
	31.02	50/250/500		Greenville, USA	
	31.02	5	TGNB	R. Cultural, Guatemala	
9675	31.01	100	DMQ9	Deutsche Welle, Germany	
	31.01	15/100		BBC, London, Gt. Britain	
	31.01	5/100		Warsaw, Poland	
	31.01	1	CR6SG	R. Clube de Huila, Angola	
	31.01	5		R. Somali, Somali	
	31.01	20/200		R. Japan, Japan	
	31.01	10	ZYT29	R. Diario da Manha, Brazil	
	31.01	7.5	OAZ4L	R. del Pacifico, Peru	

kc	m	kW	Call	Stations & countries	Rem.
9680	30.99	20/50		R. Liberty, Germany	
	30.99	100		Beyrouth, Lebanon	
	30.99	10/100	VUD	AIR Delhi, India	
	30.99	10	VLH/R9	Melbourne, Australia	
9685	30.98	100	DMQ9	Deutsche Welle, Germany	
	30.98	50	BED73	Taipei (BCC), Taiwan	
	30.98	1	HOF31	Onda Popular, Panama	
	30.98	7.5	ZYR227	R. Gazeta, Brazil	
9690	30.96	75		BBC, London, Gt. Britain	
	30.96	25/100		Vatican Radio	
	30.96	10		Lagos, Nigeria	
	30.96	120/240		Peking, China	
	30.96	10/100	VUD	AIR Delhi, India	
	30.96	7.5/100		BBC, Singapore	
	30.96	10	BED22	Taipei (BCC), Taiwan	
	30.96	100	LRA32	R. Nacional, Argentina	
9695	30.94	20/100	ORU	Wavre, Belgium	
	30.94	10/100/250		R. Free Europe, Germany	
	30.94	50/100		R. Nacional, Spain	
	30.94	50		R. Cambodge, Cambodia	
	30.94	20/200		R. Japan, Japan	
	30.94	10/50		Karachi, Pakistan	
	30.94	7.5/10		Dacca, Pakistan	
	30.94	0.25	ZK3	Rarotonga, Cook Isl.	
	30.94	7.5	ZYB22	R. Rio Mar, Brazil	
	30.94	1	OCX4Y	R. Continente, Peru	
9700	30.93	120		R. Sofia, Bulgaria	
	30.93	15/100		BBC, London, Gt. Britain	
	30.93	50		Murmansk, USSR	
	30.93	50/200		Delano, USA	
	30.93	50	DL2/3	AFRTS, Los Angeles, USA	
	30.93	10	CE970	La Voz de Chile, Chile	
9705	30.91	10/100/250		R. Free Europe, Germany	
	30.91	75		BBC, London, Gt. Britain	
	30.91	100		Hörby, Sweden	
	30.91	100	ETLF	Addis Ababa, Ethiopia	
	30.91	10/100	VUD	AIR Delhi, India	
	30.91	20/200		R. Japan, Japan	
	30.91	10/50		Karachi, Pakistan	
	30.91	260		Bonaire, Neth. Antilles	
	30.91	10	ZYZ24	R. Maua, Brazil	
9710	30.90	10/100/250		R. Free Europe, Germany	
	30.90	15/100		BBC, London, Gt. Britain	
	30.90	35		Thessaloniki (VOA), Greece	
	30.90	50/60/100		R. Roma, Italy	
	30.90	50		Kiev, USSR	
	30.90	10		Forest Side, Mauritius	
	30.90	15/120		Peking, China	
	30.90	50	YDF6	Djakarta, Indonesia	
	30.90	50/250/500		Greenville, USA	
	30.90	7	LRX2	R. El Mundo, Argentina	
	30.90	1	OAX9D	R. Tropical, Peru	
9715	30.88	20		Tirana, Albania	
	30.88	10/100/250		R. Free Europe, Germany	
	30.88	50/100		R. Nederland, Holland	
	30.88	50		R. Moscow, USSR	
	30.88	50		R. TV Congol, Congo Rep.	
	30.88	15/120		Peking, China	
	30.88	2/10		Call of the Orient, Philipp.	
	30.88	1	CP21	R. La Plata, Bolivia	
9720	30.86	10/100/250		R. Free Europe, Germany	
	30.86	120		Riazan, USSR	
	30.86	25/100		Dakar, Senegal	
	30.86	20		Paradys, So. Africa	
	30.86	35		Colombo, Ceylon	
	30.86	50		Riyahd, Saudi Arabia	
	30.86	0.2		Nhatrang, Vietnam	
	30.86	110		Bethany, USA	
	30.86	50	PRL7	R. Nacional, Brazil	
9725	30.85	100		R. Berlin Int, Germany (DDR)	
	30.85	10/100/250		R. Free Europe, Germany	
	30.85	15/100		BBC, London, Gt. Britain	
	30.85	100		Irkutsk, USSR	
	30.85	20	4XB51	Tel Aviv, Israel	
	30.85	7.5/100		BBC, Singapore	
	30.85	50/250/500		Greenville, USA	
9730	30.83	50		R.Berlin Int,Germany (DDR)	
	30.83	50/100		R. Nederland, Holland	
	30.83	1.5		R. Brazzaville, Congo	
	30.83	10/100	VUD	AIR Delhi, India	
	30.83	10		Rawalpindi, Pakistan	
	30.83	260		Bonaire, Neth. Antilles	
	30.83	7.5	ZYU59	R.Soc.Farroupilha,Brazil	
9735	30.82	100	DMQ9	Deutsche Welle, Germany	
	30.82	75		BBC, London, Gt. Britain	
	30.82	15/120		Peking, China	
	30.82	50/200		Delano, USA	

kc	m	kW	Call	Station & countries	Rem.
9740	30.80	15/100		BBC, London, Gt. Britain	
	30.80	100	CSA27	R. Nacional, Portugal	
	30.80	15		Tula, USSR	
	30.80	50		Nikolaievsk, USSR	
	30.80	35/50/100		Tanger (VOA), Morocco	
	30.80	20/200		R. Japan, Japan	
	30.80	100		Amman, Jordan	
	30.80	10/50		Karachi, Pakistan	
	30.80	1	LRS1	R. Splendid, Argentina	
9745	30.78	50/100		R. Nederland, Holland	
	30.78	50		R. Mali, Mali	
	30.78	5		Kotabaru, Indonesia	
	30.78	3.5	BEC62	Air Force St, Taiwan	
	30.78	20	TAP	R. Ankara, Turkey	
	30.78	7.5	ZYR57	R. Cultura, Brazil	
	30.78	1/30	HCJB	La Voz de los Andes, Ecuador	
9750	30.77	10/100/250		R. Free Europe, Germany	
	30.77	25/50		R. Liberty, Germany	
	30.77	75		BBC, London, Gt. Britain	
	30.77	50		Khabarovsk, USSR	
	30.77	10/50		Karachi, Pakistan	
	30.77	50		Voice of Malaysia, Malaya	
	30.77	2.1	OAX8W	R. Sideral, Peru	
9752	30.77			Pyongyang, Korea (Dem.Rep.	
9755	30.76	100		Allouis, France	
	30.76	75		BBC, London, Gt. Britain	
	30.76	100	ETLF	Addis Ababa, Ethiopia	
	30.76	120/240		Peking, China	
	30.76	10/50		Karachi, Pakistan	
	30.76	25	BED74	Taipei (BCC), Taiwan	
	30.76	1		Saigon, Vietnam	
	30.76	7.5	ZYW23	R. Brasil Central, Brazil	
9760	30.74	100		Munich (VOA), Germany	
	30.74	15/100		BBC, London, Gt. Britain	
	30.74	50		Stanislav, USSR	
	30.74	0.3		Diyarbakir, Turkey	
	30.74			Hanoi, Vietnam (Dem.Rep.)	
9765	30.72	20/100	ORU	Wavre, Belgium	
	30.72	75		BBC, London, Gt. Britain	
	30.72	100		Hörby, Sweden	
	30.72	100		Leningrad, USSR	
	30.72	1	CR6RZ	R. Angola, Angola	
	30.72	100	ETLF	Addis Ababa, Ethiopia	
	30.72	15/120		Peking, China	
	30.72	10/100	VUD	AIR Delhi, India	
	30.72	20/200		R. Japan, Japan	
	30.72	50/250/500		Greenville, USA	
9770	30.71	1/50	OEI47	Vienna, Austria	
	30.71	75		BBC, London, Gt. Britain	
	30.71	20	YDB4	Djakarta, Indonesia	
	30.71	0.3		Iskenderun, Turkey	
	30.71	50/250/500		Greenville, USA	
	30.71	0.4	4VEH	R. St. 4VEH, Haiti	
	30.71	1	OAX8O	R. Amazonas, Peru	
	30.71	1	PRL4	R. dif. Educacão, Brazil	
				9775–11700 kc	
9775	30.69	120/240		Peking, China	
	30.69	7.5	ZYW23	R. Brasil Central, Brazil	
9780	30.67	50		R. Moscow, USSR	
	30.67	50/100		Cairo, Un. Arab. Rep.	
9785	30.66			Baku, USSR	
	30.66	120/240		Peking, China	
9790	30.64			Khabarovsk, USSR	
	30.64	50/100		Cairo, Un. Arab. Rep.	
9795	30.63	100		Praha, Czechoslovakia	
9800	30.61	50		R. Moscow, USSR	
	30.61	120/240		Peking, China	
9081	30.58	50		R. Moscow, USSR	
9825	30.53	15/100		BBC, London, Gt. Britain	
9833	30.51	100		Budapest, Hungary	
9840	30.49			Baku, USSR	
	30.49			Hanoi, Vietnam (Dem. Rep.)	
9850	30.43	15/120		Peking, China	
9880	30.36	120/240		Peking, China	
9900	30.30	120/240		Peking, China	
9905	30.26			Khabarovsk, USSR	
9915	30.26	15/100		BBC, London, Gt. Britain	
	30.26	10/100	VUD	AIR Delhi, India	
9920	30.24	15/240		Peking, China	
9945	30.17	120/240		Peking, China	
9965	30.11	120/240		Peking, China	
9972	30.08	15/120		Peking, China	
9990	30.02			Yunnan, China	
*10000	30.00	0.5	MSF	Teddington, Gt. Britain	
*	30.00	20	RWM	Moscow, USSR	
*	30.00	0.25	ZUO	Johannesburg, So. Africa	
*	30.00		BVP	Peking, China	

kc	m	kW	Call	Stations & countries	Rem.
*10000	30.00	2	ATA	New Delhi, India	
*	30.00	2	JJY	Tokyo, Japan	
*	30.00	2	WWVH	Puunene, Hawaii	
*	30.00	9	WWV	Lanham, USA	
*	30.00	2	LOL	Buenos Aires, Argentina	
10220	29.25	20	PSH	Agencia Nacional, Brazil	
10245	29.28			Sinkiang, China	
10260	29.24	15/120		Peking, China	
**10331	29.05		GPB30B	Hailsham, Gt. Britain	
**10332	29.04		GPB30A	Hailsham, Gt. Britain	
10335	29.03	10/100	VUD	AIR Delhi, India	
10530	28.50			Alma Ata, USSR	
10885	27.60	25		Ulan Bator, Mongolia	
11015	27.25		ZNX49	Bridgetown, Barbados	
11040	27.17			Inner Mongolia, China	
11100	27.30	15/120		Peking, China	
11290	26.57	15/120		Peking, China	
11330	26.47	15/120		Peking, China	
11445	26.21	120/240		Peking, China	
11455	29.19	15/120		Peking, China	
11505	26.08	120/240		Peking, China	
11515	26.00	15/120		Peking, China	
11570	25.93	50		R. Moscow, USSR	
11610	25.87	7.5/10		Dacca, Pakistan	
11630	25.79	15/120		Peking, China	
11650	25.75	120/240		Peking, China	
	25.75	10/50		Karachi, Pakistan	
11660	25.73	15/120		Peking, China	
11672	25.70	10/50		Karachi, Pakistan	
11675	25.70	15/120		Peking, China	
11685	25.67	120/240		Peking, China	
11690	25.66	15/240		Peking, China	
11695	25.65			R. Tashkent, USSR	
		11700–11975 kc (25 metre band)			
11700	25.64	1	CR6RR	R. Diamang, Angola	
	25.64	1	TGQB	R. Nacional, Guatemala	
11705	25.63	100		Hörby, Sweden	
	25.63	15/100		BBC, London, Gt. Britain	
	25.63	50		Serpukhov, USSR	
	25.63	20/200		R. Japan, Japan	
	25.63	50/100/200		Delano, USA	
	25.63	50	DL2	AFRTS, Los Angeles, USA	
11710	25.62	15/100		BBC, London, Gt. Britain	
	25.62	50/100		R. Nederland, Holland	
	25.62	50		R. Brazzaville, Congo	
	25.62	35/50/100		Tanger (VOA), Morocco	
	25.62	10/100	VUD	AIR Delhi, India	
	25.62	10/50/100		R. Australia, Australia	
	25.62	50/250/500		Greenville, USA	
	25.62	50		R. Stn. KGEI, USA	
	25.62	100	LRA35	R. Nacional, Argentina	
11715	25.61	100		R. Sofia, Bulgaria	
	25.61	50/100		R. Nacional, Spain	
	25.61	100		Schwarzenburg, Switzerland	
	25.61	50		Orenburg, USSR	
	25.61	120/240		Peking, China	
	25.61	10/100	VUD	AIR Delhi, India	
	25.61	100	YDF2	Djakarta, Indonesia	
	25.61	35/100		Okinawa (VOA), Ruykyu Isl.	
	25.61	50/200		Dixon, USA	
11720	25.60	15/100		BBC, London, Gt. Britain	
	25.60	7.5/5		Athens, Greece	
	25.60	50		R. Moscow, USSR	
	25.60	10		R. Comercial de Angola	
	25.60	50		R. Leo, Congo Rep.	
	25.60	50		R. Canada, Canada	
	25.60	10	PRL8	R. Nac. Brasilia, Brazil	
11725	25.59	10/100/250		R. Free Europe, Germany	
	25.59	20/50		R. Liberty, Germany	
	25.59	50		R. Brazzaville, Congo	
	25.59	15/120		Peking, China	
	25.59	20/200		R. Japan, Japan	
	25.59	10/50		Karachi, Pakistan	
	25.59	7.5/10		Dacca, Pakistan	
	25.59	7.5/100		BBC, Singapore	
	25.59	25	BED75	Taipei (BCC), Taiwan	
11730	25.58	50/100		R. Nederland, Holland	
	25.58	50		Vinnitsa, USSR	
	25.58	10		R. Comercial de Angola	
	25.58	120/240		Peking, China	
	25.58	100		R. Iran, Iran	
	25.58	10/50		Karachi, Pakistan	
	25.58	7.5/10		Dacca, Pakistan	
	25.58	50/100/200		Delano, USA	
11735	25.56	10/100/250		R. Free Europe, Germany	
	25.56	100	LKQ	R. Norway, Norway	
	25.56	10		Tromsö, Norway	

kc	m	kW	Call	Stations & countries	Rem.
11735	25.56	10		R. Belgrade, Yugoslavia	
	25.56	50		Konevo, USSR	
	25.56	50		Tanger, Morocco	
	25.56	10/100		R. Habana, Cuba	
	25.56	7.5	ZYW28	R. Cl. de Goiania, Brazil	
	25.56	5	CXA7	R. Oriental, Uruguay	
11740	25.55	25/100		Vatican Radio	
	25.55	120/240		Peking, China	
	25.55	10/100	VUD	AIR Delhi, India	
	25.55	10/50		Karachi, Pakistan	
	25.55	2		Call of the Orient, Philipp.	
	25.55	10/50/100		R. Australia, Australia	
	25.55	5	CE1174	R. Nuevo Mundo, Chile	
11745	25.54	10/100/250		R. Free Europe, Germany	
	25.54	50/100		Cairo, Un. Arab. Rep.	
	25.54	10	ZYR65	R. Piratininga, Brazil	
11750	25.53	20/100	ORU	Wavre, Belgium	
	25.53	75		BBC, London, Gt. Britain	
	25.53	50		R. Mali, Mali	
	25.53	120/240		Peking, China	
	25.53	1/10		Tokyo (FEN), Japan	
	25.53	7.5/100		BBC, Singapore	
	25.53	0.33		Damascus, Syria	
	25.53	0.5	TGRA	R. Modelo, Guatemala	
11755	25.52	10/100/250		R. Free Europe, Germany	
	25.52	50/100		R. Nederland, Holland	
	25.52	15		Tashkent, USSR	
	25.52	50		Vladivostok, USSR	
	25.52	1	CR6RB	R. Ecclesia, Angola	
	25.52	100	ETLF	Addis Ababa, Ethiopia	
	25.52	30	HCJB	La Voz de los Andes, Ecuad.	
11760	25.51	10/100/250		R. Free Europe, Germany	
	25.51	25/50		R. Liberty, Germany	
	25.51	10		Addis Ababa, Ethiopia	
	25.51	10/100	VUD	AIR Delhi, India	
	25.51			Hanoi, Vietnam (Dem. Rep.)	
	25.51	10/50/100		R. Australia, Australia	
	25.51	0.25	ZK4	R. Rarotonga, Cook Isl.	
	25.51	50		R. Canada, Canada	
	25.51	10/100		R. Habana, Cuba	
11765	25.50			R.Berlin Int, Germany (DDR)	
	25.50	100		Trans World Radio, Monaco	
	25.50	10	CP39	La Cruz del Sur, Bolivia	
	25.50	25	ZYB8	R. dif. São Paulo, Brazil	
11770	25.49	15/100		BBC, London, Gt. Britain	
	25.49	25/100		Vatican Radio	
	25.49	20/100	VUD	AIR Delhi, India	
	25.49	7.5	YDE	Djakarta, Indonesia	
	25.49	100		Beyrouth, Lebanon	
	25.49	10/50		Karachi, Pakistan	
	25.49	110		Bethany, USA	
11775	25.48	10/100/250		R. Free Europe, Germany	
	25.48	50		Kursk, USSR	
	25.48	10	CP7	R. Illimani, Bolivia	
	25.48	10	ZYZ28	R. Mayrink Veiga, Brazil	
11780	25.47	75		BBC, London, Gt. Britain	
	25.47	50/100		R. Nederland, Holland	
	25.47	5/100		R. Cl. de Mozambique, Moz.	
	25.47	120/240		Peking, China	
	25.47	20/200		R. Japan, Japan	
	25.47	7.5	ZL3	R. New Zealand, New Zeal.	
	25.47	110		Bethany, USA	
	25.47	7	LRY2	R. Belgrano, Argentina	
11783	25.46	50		Komsomolsk, USSR	
11785	25.46	1/50	OEI52	Vienna, Austria	
	25.46	100	DMQ11	Deutsche Welle, Germany	
	25.46	10/100	VUD	AIR Delhi, India	
	25.46	100	YDF2	Djakarta, Indonesia	
	25.46	7.5/50		Malolos (VOA), Philipp.	
	25.46	7.5	ZYU61	R. Guaiba, Brazil	
11790	25.45	15/100		BBC, London, Gt. Britain	
	25.45	50		Riazan, USSR	
	25.45	35/50/100		Tanger (VOA), Morocco	
	25.45	10/50/100		R. Australia, Australia	
	25.45	50/200		Delano, USA	
	25.45	50/100	DL4/5	AFRTS, Los Angeles, USA	
11795	25.43	100	DMQ11	Deutsche Welle, Germany	
	25.43			R.Berlin Int, Germany (DDR)	
	25.43	20	YDF3	Djakarta, Indonesia	
	25.43	50	WINB	Red Lion, USA	
	25.43	10		R. Nacional Rio, Brazil	
11800	25.42	75		BBC, London, Gt. Britain	
	25.42	50/100		R. Nederland, Holland	
	25.42	50/100		R. Nacional España, Spain	
	25.42	100		Armavir, USSR	
	25.42	100		Accra, Ghana	
	25.42	35		Colombo, Ceylon	

kc	m	kW	Call	Stations & countries	Rem.
11800	25.42	120/240		Peking, China	
	25.42	20/200		R. Japan, Japan	
	25.42	10/50		Karachi, Pakistan	
	25.42	1	CE1180	Soc. Nac. de Agricult, Chile	
11805	25.41	10	OIX8	Pori, Finland	
	25.41	10/100/250		R. Free Europe, Germany	
	25.41	100		Hörby, Sweden	
	25.41	50		R. Moscow, USSR	
	25.41	35/100		Poro (VOA), Philipp.	
	25.41	10	ZYZ36	R. Globo, Brazil	
11810	25.40	50/60/100		R. Roma, Italy	
	25.40	100		Bucharest, Rumania	
	25.40	100		Hörby, Sweden	
	25.40	100		Schwarzenburg, Switzerland	
	25.40	50		Minsk, USSR	
	25.40	50		Alger I, Algeria	
	25.40	10/100	VUD	AIR Delhi, India	
	25.40	5		Amman, Jordan	
	25.40	10/50		Karachi, Pakistan	
	25.40	10/50/100		R. Australia, Australia	
11815	25.39	10/100/250		R. Free Europe, Germany	
	25.39	20/200		R. Japan, Japan	
	25.39	7.5	ZYW24	R. Brasil Central, Brazil	
11820	25.38			R. Berlin Int, Germ (DDR)	
	25.38	10/100/250		R. Free Europe, Germany	
	25.38	75		BBC, London, Gt. Britain	
	25.38	50		Krasnoyarsk, USSR	
	25.38	50		Voronesh, USSR	
	25.38	100		R. Abidjan, Ivory Coast	
	25.38	120/240		Peking, China	
	25.38	7.5/100		BBC, Singapore	
	25.38	1	OBX7O	R. Imperial, Peru	
11825	25.37	1/50		Vienna, Austria	
	25.37	20/50		R. Liberty, Germany	
	25.37	25	BED69	Taipei (BCC), Taiwan	
	25.37	4		Papéete, Tahiti	
	25.37	50/250/500		Greenville, USA	
	25.37	15	ZYK32	R. Jornal do Comercio, Brazil	
	25.37	50		Inst. Nac. de Radio y TV, Col.	
11830	25.36	10/100/250		R. Free Europe, Germany	
	25.36	50		R. dif. Congolaise, Congo Rep	
	25.36	50/250/500		Greenville, USA	
11835	25.35	50		Alger II, Algeria	
	25.35	5/100		R. Cl. de Mozambique	
	25.35	35		Colombo (VOA), Ceylon	
	25.35	2.5	4VEJ	R. St. 4VEH, Haiti	
	25.35	5	CXA19	El Espectador, Uruguay	
11840	25.34	50		BBC, London, Gt. Britain	
	25.34	5/100		Warsaw, Poland	
	25.34	100	CSA31	R. Nacional, Portugal	
	25.34	50		Irkutsk, USSR	
	25.34	10/100	VUD	AIR Delhi, India	
	25.34			Hanoi, Vietnam (Dem.Rep.)	
	25.34	10/50/100		R. Australia, Australia	
	25.34	50/80	WRUL	R. New York, USA	
11845	25.33	100		Allouis, France	
	25.33	10/50		Karachi, Pakistan	
	25.33	50/200		Dixon, USA	
11850	25.32	20/100	ORU	Wavre, Belgium	
	25.32	10/120	LLK	R. Norway, Norway	
	25.32	50		Vladivostok, USSR	
	25.32	10/100	VUD	AIR Delhi, India	
	25.32	100		Honolulu (VOA), Hawaii	
	25.32	2.5	CE1185	R. Cruz del Sur, Chile	
	25.32	3	ZPA3	R. Teleco, Paraguay	
11855	25.31	10/100/250		R. Free Europe, Germany	
	25.31	7.5/20		Omdurman, Sudan	
	25.31	10/100	VUD	AIR Delhi, India	
	25.31	20/200		R. Japan, Japan	
	25.31	50/4	DZH8	Call of the Orient, Philipp.	
	25.31	50		Jeddah, Saudi Arabia	
	25.31	50/80	WRUL	R. New York, USA	
	25.31	10		R. Paranaense, Brazil	
11860	25.31	75		BBC, London, Gt. Britain	
	25.31	100		Gorki, USSR	
	25.31	15/240		Peking, China	
	25.31	25	BED45	Taipei (BCC), Taiwan	
11865	25.28	100		Schwarzenburg, Switzerland	
	25.28	20/200		R. Japan, Japan	
	25.28	10/100		R. Habana, Cuba	
	25.28	7.5	PRA8	R. Cl. Pernambuco, Brazil	
11870	25.27	10		Kaunas, USSR	
	25.27	100		Elisabethville, Congo Rep.	
	25.27	100		Amman, Jordan	
	25.27	50		Jeddah, Saudi Arabia	
	25.27	50/250/500		Greenville, USA	
11875	25.26	25/100		Vatican Radio	

kc	m	kW	Call	Stations & countries	Rem.
11875	25.26	100	ETLF	Addis Ababa, Ethiopia	
	25.26	20/200		R. Japan, Japan	
	25.26	10/50		Karachi, Pakistan	
	25.26	75/100	DYH6	Dumaguete City, Philipp.	
	25.26	10	ZYN32	R. Soc. Bahia, Brazil	
11880	25.25	75		BBC, London, Gt. Britain	
	25.25	15		Sverdlovsk, USSR	
	25.25	7.5/100		BBC, Singapore	
	25.25	10/50/100		R. Australia, Australia	
	25.25	10	VLH11	Melbourne, Australia	
	25.25	5	XEHH	R. dif. Comerciales, Mexico	
	25.25	1	LRS	R. Splendid, Argentina	
11885	25.24	1/50		Vienna, Austria	
	25.24	100		Allouis, France	
	25.24	10/100/250		R. Free Europe, Germany	
	25.24	120/240		Peking, China	
	25.24	10/50		Karachi, Pakistan	
	25.24	7.5/10		Dacca, Pakistan	
	25.24	10	ZYZ52	R. Mauá, Brazil	
	25.24	10	CXA68	R. Sarandi, Uruguay	
11890	25.23	1/50		Vienna, Austria	
	25.23	100	DMQ11	Deutsche Welle, Germany	
	25.23	15/100		BBC, London, Gt. Britain	
	25.23	120		Riazan, USSR	
	25.23	7.5/10		Dacca, Pakistan	
	25.23	50		Jeddah, Saudi Arabia	
	25.23	50/250/500		Greenville, USA	
11895	25.22	20/100	ORU	Wavre, Belgium	
	25.22	100		Praha, Czechoslovakia	
	25.22	10/100/250		R. Free Europe, Germany	
	25.22	10/100	VUD	AIR Delhi, India	
	25.22	5		Grenada, Windward Isl.	
11900	25.21	15		Sverdlovsk, USSR	
	25.21	20		Paradys, So. Africa	
	25.21	100		Voice of Malaysia, Malaya	
	25.21	35/100		Poro (VOA), Philipp.	
	25.21	5	CE1190	La Voz de Chile, Chile	
	25.21	20	CXA10	S.O.D.R.E., Uruguay	
11905	25.20	75/100		BBC, London, Gt. Britain	
	25.20	50/60/100		R. Roma, Italy	
	25.20	50		Kazan, USSR	
	25.20	3	BED44	Taipei (BCC), Taiwan	
11910	25.19	75/100		BBC, London, Gt. Britain	
	25.19	100		R. Budapest, Hungary	
	25.19	50		Jiguli, USSR	
	25.19	50/250		Monrovia (VOA), Liberia	
	25.19	15/240		Peking, China	
	25.19	10/50		Karachi, Pakistan	
	25.19	50	HSK9	R. Thailand, Thailand	
11915	25.18	10/100/250		R. Free Europe, Germany	
	25.18	50/100		R. Nederland, Holland	
	25.18	50		Dushanbe, USSR	
	25.18	10		Kaunas, USSR	
	25.18	50/100		Cairo, Un. Arab Rep.	
	25.18	20		Damascus, Syria	
	25.18	7.5	PRC20	R. Soc. Gaucha, Brazil	
	25.18	30	HCJB	Voz de los Andes, Ecuador	
11920	25.17	100		Allouis, France	
	25.17	15/100		BBC, London, Gt. Britain	
	25.17	35		Colombo (VOA), Ceylon	
	25.17	10/100	VUD	AIR Delhi, India	
	25.17	10/50		Karachi, Pakistan	
	25.17	50/4	DZF2	Call of the Orient, Philipp.	
	25.17	50/250/500		Greenville, USA	
11925	25.16	100	DMQ11	Deutsche Welle, Germany	
	25.16	7.5/5		Athens, Greece	
	25.16	100	CSA95	R. Nacional, Portugal	
	25.16	50		Tashkent, USSR	
	25.16	150		Voronesh, USSR	
	25.16	1	CR6RD	Nova Lisboa, Angola	
	25.16	15/120		Peking, China	
	25.16	50	HLK6	Seoul, Korea	
	25.16	10	ZYR78	R. Bandeirantes, Brazil	
11930	25.15	100	DMQ11	Deutsche Welle, Germany	
	25.15	10/100/250		R. Free Europe, Germany	
	25.15	75		BBC, London, Gt. Britain	
	25.15	35/100		Poro (VOA), Philipp.	
11935	25.14	20/50		R. Liberty, Germany	
	25.14	50/100		R. Nederland, Holland	
	25.14	100	CSA72	R. Nacional, Portugal	
	25.14	15/120		Peking, China	
	25.14	7.5	ZYS35	R. Cl. Paranaense, Brazil	
11940	25.13	10/100/250		R. Free Europe, Germany	
	25.13	100		Bucharest, Rumania	
	25.13	50		Vinnitsa, USSR	
	25.13	1	CR6SG	R. Cl. de Huila, Angola	
	25.13	100	ETLF	Addis Ababa, Ethiopia	

kc	m	kW	Call	Stations & countries	Rem.
11940	25.13	50		R. Cambodge, Cambodia	
	25.13	20/200		R. Japan, Japan	
	25.13	10/50		R. Kuwait, Kuwait	
	25.13	50		R. Malaysia, Singapore	
	25.13	50/80	WRUL	R. New York, USA	
11945	25.12	75		BBC, London, Gt. Britain	
	25.12	120/240		Peking, China	
	25.12	5	ZPA5	R. Encarnación, Paraguay	
11950	25.10	50/100		R. Nederland, Holland	
	25.10	15		Kharkov, USSR	
	25.10	50		Riyadh, Saudi Arabia	
	25.10	50/250/500		Greenville, USA	
	25.10	7.5	PRL3	R. dif. Educação, Brazil	
11955	25.09	75		BBC, London, Gt. Britain	
	25.09	50/100		R. Nederland, Holland	
	25.09	5/100		Warsaw, Poland	
	25.09	120/240		Peking, China	
	25.09	7.5/100		BBC, Singapore	
11960	25.08	25/50		R. Liberty, Germany	
	25.08	50/100		R. Nederland, Holland	
	25.08	100		Minsk, USSR	
	25.08	35/50/100		Tanger (VOA), Morocco	
	25.08	50/250/500		Greenville, USA	
	25.08	5	CE1196	Soc. Nac. de Mineria, Chi.	
11965	25.07	100	DMQ11	Deutsche Welle, Germany	
	25.07	100		Conakry, Guinea Rep.	
	25.07	120/240		Peking, China	
	25.07	50	PRB24	R. Record, Brazil	
11970	25.06	20/50		R. Liberty, Germany	
	25.06	15		Kharkov, USSR	
	25.06	4		R. Brazzaville, Congo	
	25.06	50		R. Tunis, Tupisia	
	25.06	100		Amman, Jordan	
	25.06	3	BED37	Chiayi (BCC), Taiwan	
	25.06	100		R. Habana, Cuba	
	25.06	260		Bonaire, Neth. Antilles	
11975	25.05	10/50		ELWA, Liberia	
	25.05	120/240		Peking, China	
11980	25.04	50		Komsomolsk, USSR	
	25.04	50/100		Cairo, Un. Arab. Rep.	
	25.04	120/240		Peking, China	
11990	25.02	100		Praha, Czechoslovakia	
				11995–15100 kc	
12010	24.98	120/240		Peking, China	
12040	24.92	15/100		BBC, London. Gt. Britain	
12055	24.89	120/240		Peking, China	
12058	24.88	2	PRB25	Agencia Nacional, Brazil	
12060	24.88	50		R. Moscow, USSR	
12095	24.80	15/100		BBC, London, Gt. Britain	
**12790	23.50		GKU5	Hailsham, Gt. Britain	
**13555	22.15		GIC33	Hailsham, Gt. Britain	
13750	21.82			Khabarovsk, USSR	
**14670	20.45	3	CHU	Dom. Observatory, Canada	
14690	20.45	20	PSF	Agencia Nacional, Brazil	
*15000	20.00	20	RWM	Moscow, USSR	
*	20.00		BPV	Peking, China	
*	20.00	2	JJY	Tokyo, Japan	
*	20.00	2	WWVH	Puunene, Hawaii	
*	20.00	9	WWV	Lanham, USA	
*	20.00	2	LOL	Buenos Aires, Argentina	
15030	19.86	15/240		Peking, China	
15044	19.94			Hanoi, Vietnam (Dem. R.)	
15050	19.92	120/240		Peking, China	
15070	19.91	15/100		BBC, London, Gt. Britain	
15085	19.89	120/240		Peking, China	
	19.89	5		Grenada, Windward Isl.	
15095	19.87	120/240		Peking, China	
				15100–15450 kc (19 metre band)	
15105	19.86	50/75		BBC, London, Gt. Britain	
	19.86	10/100	VUD	AIR Delhi, India	
	19.86	20/200		R. Japan, Japan	
	19.86	7.5	ZYZ32	R. Rural Brasileira, Braz.	
15110	19.85	15/100		BBC, London, Gt. Britain	
	19.85	100		Kiev, USSR	
	19.85	100		R. Iran, Iran	
	19.85	7.5	ZL21	Wellington, New Zealand	
	19.85	1	XERR	R. dif. Comerciales, Mex.	
15115	19.85	10/100/250		R. Free Europe, Germany	
	19.85	25/100		Vatican Radio	
	19.85	50/100		Cairo, Un. Arab Rep.	
	19.85	120/240		Peking, China	
	19.85	20/200		R. Japan, Japan	
	19.85	7.5		R. Soc. Guairaca, Brazil	
	19.85	1/30	HCJB	Voz de los Andes, Ecuador	
15116	19.85			Hanoi, Vietnam (Dem. R.)	
15120	19.84	5/100		Warsaw, Poland	
	19.84	25/100		Vatican Radio	
15120	19.84	35/100		Poro (VOA), Philipp.	
15125	19.83	100	CSA64	R. Nacional, Portugal	
	19.83	50		R. Kabul, Afghanistan	
	19.83	10	ZYN31	R. Soc. Bahia, Brazil	
15130	19.83	50		Simferopol, USSR	
	19.83	10/100	VUD	AIR Delhi, India	
15135	19.82	10/100/250		R. Free Europe, Germany	
	19.82	20/200		R. Japan, Japan	
	19.82	10/50		Karachi, Pakistan	
	19.82	100		Honolulu (VOA), Hawaii	
	19.82	50/80	WRUL	R. New York, USA	
	19.82	100		R. Habana, Cuba	
	19.82	10	PRB23	R. Panamericana, Brazil	
15140	19.82	75/100		BBC, London, Gt. Britain	
	19.82	50		Petropavlovsk, USSR	
	19.82	120/240		Peking, China	
15145	19.81	10/100/250		R. Free Europe, Germany	
	19.81	10/50		Karachi, Pakistan	
	19.81	15	ZYK33	R. Jornal do Comercio, Br.	
15148	19.80	1	CE1515	Corp. Chil. Broadc, Chile	
15150	19.80	50		Khabarovsk, USSR	
	19.80	100		Minsk, USSR	
	19.80	120/240		Peking, China	
	19.80	7.5/100	YDC	Djakarta, Indonesia	
	19.80	10/50		R. Kuwait, Kuwait	
	19.80	35/100		Okinawa (VOA), Ryukyu Is.	
	19.80	50/250/500		Greenville, USA	
	19.80	40	OAX4T	R. Nacional, Peru	
15155	19.80	25/100		Vatican Radio	
	19.80	50		ELWA, Liberia	
	19.80	20		Paradys, So. Africa	
	19.80	10/50		Karachi, Pakistan	
	19.80	35/100		Poro (VOA), Philipp.	
	19.80	10/100		R. Habana, Cuba	
	19.80	25	ZYB9	R. dif. de São Paulo, Braz.	
15160	19.79	100		Allouis, France	
	19.79	50		Chita, USSR	
	19.79	10/50		Karachi, Pakistan	
	19.79	7.5/10		Dacca, Pakistan	
	19.79	100	TAU	R. Ankara, Turkey	
	19.79	10	XEWW	Voz de la Amer. Latina, Mex.	
15165	19.78	50	OZF7	R. Denmark, Denmark	
	19.78	10/100	VUD	AIR Delhi, India	
	19.78	7.5/50		Malolos (VOA), Philipp.	
	19.78	50		Damascus, Syria	
	19.78	5	ZYN7	R. Cl. Ceará, Brazil	
15170	19.78	10/100/250		R. Free Europe, Germany	
	19.78	10/100	LKV	R. Norway, Norway	
	19.78	10/100	VUD	AIR Delhi, India	
	19.78	100		Amman, Jordan	
15175	19.77	10/120	LLM	R. Norway, Norway	
	19.77	10		Kaunas, USSR	
	19.77	15/120		Peking, China	
	19.77	20/200		R. Japan, Japan	
	19.77	7.5		Emis. Riograud., Brazil	
15180	19.76	75		BBC, London. Gt. Britain	
	19.76	50/100		R. Nederland, Holland	
	19.76	10/50/100		R. Australia, Australia	
	19.76	0.5	OBX4C	R. El Sol, Peru	
15185	19.76	100	OIX4	Pori, Finland	
	19.76	10/100/250		R. Free Europe, Germany	
	19.76	100		R. Budapest, Hungary	
	19.76	50		R. Achkabad, USSR	
	19.76	100		Tanger, Morocco	
	19.76	10/100	VUD	AIR Delhi, India	
	19.76	35/100		Poro (VOA), Philipp.	
	19.76	50/200		Dixon, USA	
15190	19.75	100		Munich (VOA), Germany	
	19.75	50		BBC, London, Gt. Britain	
	19.75	50		R. Brazzaville, Congo	
	19.75	100		Accra, Ghana	
	19.75	120/240		Peking, China	
	19.75	10/100	VUD	AIR Delhi, India	
	19.75	50		Damascus, Syria	
	19.75	50		R. Canada, Canada	
	19.75	5	PRK9	R. Inconfidencia, Braz.	
15195	19.74	10/100/250		R. Free Europe, Germany	
	19.74	20/200		R. Japan, Japan	
	19.74	10/50		Karachi, Pakistan	
	19.74	20	TAQ	R. Ankara, Turkey	
15200	19.74	15/100		BBC, London, Gt. Britain	
	19.74	50		Kalatch, USSR	
	19.74	5	XESC	R. dif. XEMC, Mexico	
15205	19.73	100	DMQ15	Deutsche, Welle, Germany	
	19.73	35		Colombo, Ceylon	
	19.73	10/50		Karachi, Pakistan	
	19.73	35/100		Poro (VOA), Philipp.	

kc	m	kW	Call	Stations & countries	Rem.
15205	19.73	50/250/500		Greenville, USA	
	19.73	10		Agencia Nacional, Braz.	
15210	19.72	15/100		BBC, London, Gt. Britain	
	19.72	100		Moscow, USSR	
	19.72	50/100		Cairo, Un. Arab Rep.	
	19.72	120/240		Peking, China	
	19.72	35/100		Poro (VOA), Philipp.	
	19.72	35		AFRTS, Los Angeles, USA	
	19.72	3	ZPA7	R. Guarani, Paraguay	
15215	19.71	10/100/250		R. Free Europe, Germany	
	19.71	50/250/500		Greenville, USA	
	19.71	2.5	ZYY9	R. Timbira, Brazil	
15220	19.71	50/100		R. Nederland, Holland	
	19.71	50		Riga, USSR	
	19.71	20		Paradys, So. Africa	
	19.71	120/240		Peking, China	
	19.71	10/50/100		R. Australia, Australia	
15225	19.70	50		R. Kabul, Afghanistan	
	19.70	10/100	VUD	AIR Delhi, India	
	19.70	20/200		R. Japan, Japan	
	19.70	50		Bound Brook USA	
	19.70	10	ZYN30	R. Cult. Bahia, Brazil	
	19.70	25	CXA64	La Voz de Melo, Uruguay	
15230	19.70	50/75		BBC, London, Gt. Britain	
	19.70	100		Praha, Czechoslovakia	
	19.70	50		Leningrad, USSR	
	19.70	10	VLH15	Melbourne, Australia	
15235	19.69	15/100		BBC, London, Gt. Britain	
	19.69	120/240		Peking, China	
	19.69	20/200		R. Japan, Japan	
	19.69	50/250/500		Greenville, USA	
15240	19.69	1/50		Vienna, Austria	
	19.69			R. Berlin Int, Germ. (DDR)	
	19.69	100		Hörby, Sweden	
	19.69	50		Kiev, USSR	
	19.69	10		R. Belgrade, Yugoslavia	
	19.69	15/120		Peking, China	
	16.69			Pyongyang, Korea (Dem. R.)	
	19.69	10/50/100		R. Australia, Australia	
	19.69	50		R. St. KGEI, USA	
15245	19.68	100		Allouis, France	
	19.68	15/100		BBC, London, Gt. Britain	
	19.68	10	ZYE21	R. Marajoara, Brazil	
15250	19.67	100		R. Bucharest, Rumania	
	19.67	120/240		Peking, China	
	19.67	7.5/50		Malolos (VOA), Philipp.	
	19.67	35/100		Poro (VOA), Philipp.	
	19.67	50/250/500		Greenville, USA	
15255	19.66	10/100/250		R. Free Europe, Germany	
	19.66	10/50		Karachi, Pakistan	
15260	19.66	75/250		BBC, London, Gt. Britain	
	19.66	120/240		Peking, China	
	19.66	1		Tokyo (FEN), Japan	
	19.66	7.5/100		BBC, Singapore	
15265	19.66	10/100/250		R. Free Europe, Germany	
	19.66	100		Gorki, USSR	
	19.66	50		Kenga, USSR	
	19.66	100	ETLF	Addis Ababa, Ethiopia	
	19.66	7.5/10		Dacca, Pakistan	
	19.66	50	PRG9	R. Excelsior, Brazil	
15270	19.65	120/240		Peking, China	
	19.65	10/50		Karachi, Pakistan	
	19.65	7.5/10		Dacca, Pakistan	
	19.65	1	CXA18	S.O.D.R.E., Uruguay	
15275	19.64	100	DMQ15	Deutsche Welle, Germany	
	19.64	50/100		R. Nederland, Holland	
	19.64	50		Riazan, USSR	
	19.64	10/50		Karachi, Pakistan	
15280	19.63	100	DMQ15	Deutsche Welle, Germany	
	19.63	3	BED36	Taipei (BCC), Taiwan	
	19.63	7.5	ZL4	Wellington, New Zealand	
	19.63	50/250/500		Greenville, USA	
15285	19.63	100		Praha, Czechoslovakia	
	19.63	75/100		BBC, London, Gt. Britain	
	19.63	35		Colombo (VOA), Ceylon	
	19.63	20/200		R. Japan, Japan	
	19.63	10/50		Karachi, Pakistan	
	19.63	7.5/10		Dacca, Pakistan	
	19.63	10		Call of the Orient, Philipp.	
15290	19.62	1/50		Vienna, Austria	
	19.62	35/100		Tanger (VOA), Morocco	
	19.62	15/240		Peking, China	
	19.62	10/100	VUD	AIR Delhi, India	
	19.62	50/100/200		Dixon, USA	
	19.62	10	LRU	R. El Mundo, Argentina	
15295	19.62	10/100/250		R. Free Europe, Germany	
	19.62	50		Voronesh, USSR	
15205	19.62	25/50/100		Tanger (VOA), Morocco	
	19.62	5/100		R. Clube de Mozambique	
	19.62	10	PRL8	R. Nacional Rio, Brazil	
15300	19.61	50/75		BBC, London, Gt. Britain	
	19.61	10		Addis Ababa, Ethiopia	
	19.61	15/120		Peking, China	
	19.61	2/10	DZH9	Call of the Orient, Philipp.	
15305	19.60	100		Schwarzenburg, Switzerl.	
	19.60	50		Lvov, USSR	
15310	19.60	75		BBC, London, Gt. Britain	
	19.60	50		Tula, USSR	
	19.60	10/100	VUD	AIR Delhi, India	
	19.60	20/200		R. Japan, Japan	
	19.60	75/100		BBC, Singapore	
15313	19.59	15/120		Peking, China	
15315	19.59	50		Moscow, USSR	
	19.59	50/250		Monrovia (VOA), Liberia	
	19.59	35/50/100		Tanger (VOA), Morocco	
	19.59	35/100		Poro (VOA), Philipp.	
	19.59	10/100		R. Habana, Cuba	
15320	19.58	50		Minsk, USSR	
	19.58	3	BED38	Chiayi (BCC), Taiwan	
	19.58	50		R. Canada, Canada	
15325	19.58	50/60/100		R. Roma, Italy	
	19.58	20/200		R. Japan, Japan	
	19.58	10/50		Karachi, Pakistan	
	19.58	50/100/200		Delano, USA	
	19.58	50/250/500		Greenville, USA	
	19.58	1	ZYR228	R. Gazeta, Brazil	
15330	19.57	120		R. Sofia, Bulgaria	
	19.57	100		Colombo, Ceylon	
	19.57	10/50/100		R. Australia, Australia	
	19.57	50/250/500		Greenville, USA	
15335	19.56	20/100	ORU	Wavre, Belgium	
	19.56	7.5/10		Dacca, Pakistan	
	19.56	10/50		Karachi, Pakistan	
	19.56	7.5	ZYU60	R. Soc. Farroupilha, Braz.	
15340	19.56			R. Berlin Int, Germ. (DDR)	
	19.56	20/50		R. Liberty, Germany	
	19.56	50		Sverdlovsk, USSR	
	19.56	100		R. Habana, Cuba	
15345	19.55	1/50		Vienna, Austria	
	19.55	7.5/5		Athens, Greece	
	19.55	50		Sebaa Aioun, Morocco	
	19.55	120/240		Peking, China	
	19.55	100		Amman, Jordan	
	19.55	50	BED49	Taipei (BCC), Taiwan	
	19.55	100	LRA33	R. Nacional, Argentina	
15350	19.54	5		R. Luxembourg, Luxemb.	
	19.54	100		Vologda, USSR	
15355	19.53	10/100/250		R. Free Europe, Germany	
	19.53	100	ETLF	Addis Ababa, Ethiopia	
15360	19.53	100		BBC, London, Gt. Britain	
	19.53	20		Moscow, USSR	
15365	19.52	10/100/250		R. Free Europe, Germany	
	19.52	50/250		Monrovia (VOA), Liberia	
	19.52	50/100/200		Delano, USA	
15370	19.52	20/50		R. Liberty, Germany	
	19.52	50		R. Brazzaville, Congo	
	19.52	120/240		Peking, China	
	19.52	10	ZYC9	R. Tupi, Brazil	
15375	19.51	50/75		BBC, London, Gt. Britain	
15380	19.50	100	CSA42	R. Nacional, Portugal	
	19.50	100		R. Bucharest, Rumania	
15385	19.50	100		Gorki, USSR	
	19.50	3/50	DZF3	Call of the Orient, Philipp.	
	19.50	50	HSK9	R. Thailand, Thailand	
	19.50	10	CXA60	R. Sarandi, Uruguay	
15390	19.49	75		BBC, London, Gt. Britain	
	19.49	20/200		R. Japan, Japan	
15395	19.49	20/50		R. Liberty, Germany	
	19.49	25	BED71	Taipei (BCC), Taiwan	
	19.49	50/250/500		Greenville, USA	
15400	19.48	50/60/100		R. Roma, Italy	
	19.48	50/250/500		Greenville, USA	
15405	19.47	10/100/250		R. Free Europe, Germany	
	19.47	100	DMQ15	Deutsche Welle, Germany	
	19.47	100		Jamburg, USSR	
15410	19.47	1/50	OEI66	Vienna, Austria	
	19.47	15/100		BBC, London, Gt. Britain	
	19.47	100	ETLF	Addis Ababa, Ethiopia	
	19.47	10		Tanger, Morocco	
	19.47	50/100/200		Delano, USA	
	19.47	50	DL3	AFRTS, Los Angeles, USA	
	19.47	50/250/500		Greenville, USA	
15415	19.46	100		Kiev, USSR	
	19.46	35		Colombo (VOA), Ceylon	

kc	m	kW	Call	Stations & countries	Rem.
15415	19.46	50/250/500		Greenville, USA	
	19.46	1	ZYR206	R. Cl. Ribeirão Preto, Br.	
15417	19.46	120/240		Peking, China	
15420	19.46	10/100/250		R. Free Europe, Germany	
	19.46	75		BBC, London, Gt. Britain	
	19.46	100		R. Nacional, Spain	
	19.46	75/100	DYH7	Dumaguete City, Philipp.	
	19.46	7.5/100		BBC, Singapore	
15425	19.45	7.5/5		Athens, Greece	
	19.45	50/100		R. Nederland, Holland	
	19.45	50		Omsk, USSR	
	19.45	20/200		R. Japan, Japan	
	19.45	50	VLX15	Perth, Australia	
				15427–17700 kc	
15430	19.44	20/50		R. Liberty, Germany	
	19.44	120/240		Peking, China	
15435	19.44	75		BBC, London, Gt. Britain	
	19.44	7.5/100		BBC, Singapore	
	19.44	260		Bonaire, Neth. Antilles	
15440	19.43	120		Kiev, USSR	
	19.43	50/80	WRUL	R. New York, USA	
	19.43	260		Bonaire, Neth. Antilles	
15445	19.43	15/100		BBC, London, Gt. Britain	
	19.43	50/100		R. Nederland, Holland	
	19.43	100		Hörby, Sweden	
	19.43	50		R. Brazzaville, Congo	
	19.43	50/250		Monrovia (VOA), Liberia	
	19.43	15/120		Peking, China	
	19.43	10		R. Nac. Brasilia, Brazil	
	19.43	50		R. Rio, Brazil	
15448	19.42	100		Praha, Czechoslovakia	
15475	19.38	50/100		Cairo, Un. Arab Rep.	
15480	19.38	15/120		Peking, China	
15490	19.36			Erevan, USSR	
15500	19.35	120/240		Peking, China	
15520	19.33	120/240		Peking, China	
15550	19.29	15/120		Peking, China	
	19.29	7.5/10		Dacca, Pakistan	
15590	19.24	15/120		Peking, China	
15610	19.22	15/120		Peking, China	
15670	19.15	120/240		Peking, China	
15710	19.10	15/120		Peking, China	
	19.10	10		R. Sanaa, Yemen	
15880	18.89	15/120		Peking, China	
17450	17.20	15/120		Peking, China	
17490	17.15	15/120		Peking, China	
17533	17.11	15/120		Peking, China	
17605	17.04	15/120		Peking, China	
17630	17.02	7.5/10		Dacca, Pakistan	
17640	17.01	10		Dacca, Pakistan	
17665	16.98	15/120		Peking, China	
17680	16.97	120/240		Peking, China	
**17685	16.96		GIC37	Hailsham, Gt. Britain	
17690	16.96	50/100		Cairo, Un. Arab Rep.	
17695	16.95	15/100		BBC, London, Gt. Britain	
				17700–17900 kc (16 metre band)	
17705	16.94	75/100		BBC, London, Gt. Britain	
	16.94	10	CR6RZ	R. Angola, Angola	
	16.94	35/50/100		Tanger (VOA), Morocco	
	16.94	10/100	VUD	AIR Delhi, India	
	16.94	7.5/50		Malolos (VOA), Philipp.	
	16.94	10	ZYR97	R. Novo de Julho, Brazil	
17710	16.94	50		R. Cambodge, Cambodia	
	16.94	10/50		Karachi, Pakistan	
	16.94	7.5/10		Dacca, Pakistan	
	16.94	50/250/500		Greenville, USA	
17715	16.93	75/100		BBC, London, Gt. Britain	
	16.93	10/100	VUD	AIR Delhi, India	
	16.93	10/50		Karachi, Pakistan	
	16.93	75/100	DYH8	Dumaguete City, Philipp.	
17720	16.93	50		R. Brazzaville, Congo	
	16.93	120/240		Peking, China	
	16.93	7.5/10		Dacca, Pakistan	
	16.93	10/50		Karachi, Pakistan	
	16.93	50	WINB	Red Lion, USA	
	16.93	260		Bonaire, Neth. Antilles	
17725	16.93	10/100/250		R. Free Europe, Germany	
	16.93	20/200		R. Japan, Japan	
	16.93	1	ZYR232	R. Universitaria, Brazil	
17730	16.92	250		BBC, London, Gt. Britain	
	16.92	50		Irkutsk, USSR	
	16.92	120/240		Peking, China	
	16.92	7.5/10		Dacca, Pakistan	
17735	16.92	10/100/250		R. Free Europe, Germany	
	16.92	100		Munich (VOA), Germany	
	16.92	10/100	VUD	AIR Delhi, India	
	16.92	35/100		Poro (VOA), Philippines	
17735	16.92	50/200		Dixon, USA	
17740	16.91			R. Berlin Int, Germ. (DDR)	
	16.91	50/75		BBC, London, Gt. Britain	
	16.91	50/60/100		R. Roma, Italy	
	16.91	100	CSA43	R. Nacional, Portugal	
	16.91	50/250/500		Greenville, USA	
17745	16.91	20/50		R. Liberty, Germany	
	16.91	15/100		BBC, London, Gt. Britain	
	16.91	7.5/5		Athens, Greece	
	16.91	50		Kursk, USSR	
	16.91	120/240		Peking, China	
	16.91	10/50		Karachi, Pakistan	
17750	16.90	1/50/100		R. Kuwait, Kuwait	
	16.90	10/50		R. Karachi, Pakistan	
17755	16.90	25/50		R. Liberty, Germany	
	16.90	50/75		BBC, London, Gt. Britain	
	16.90	10/100	LKW	R. Norway, Norway	
	16.90	50		Tashkent, USSR	
	16.90	20/200		R. Japan, Japan	
	16.90	10/50		Karachi, Pakistan	
	16.90	7.5/100		BBC, Singapore	
17760	16.89	10/100	VUD	AIR Delhi, India	
	16.89	10/50		Karachi, Pakistan	
	16.89	50/80	WRUL	R. New York, USA	
17765	16.89	1/50	OEI72	Vienna, Austria	
	16.89	100		Allouis, France	
	16.89	15		Tula, USSR	
	16.89	120/240		Peking, China	
	16.89	50/200		Delano, USA	
17770	16.88	10/100/250		R. Free Europe, Germany	
	16.88	50/60/100		R. Roma, Italy	
	16.88	10/50		Karachi, Pakistan	
17775	16.88	50/100		R. Nederland, Holland	
	16.88	50		Riazan, USSR	
	16.88	10		Addis Ababa, Ethiopia	
	16.88	50/250		Monrovia (VOA), Liberia	
	16.88	5/100		R. Clube de Mozambique	
17780	16.87	7.5/5		Athens, Greece	
	16.87	15/120		Peking, China	
	16.87	50/250/500		Greenville, USA	
17785	16.87	50		Volgograd, USSR	
	16.87	50/100		Cairo, Un. Arab. Rep.	
	16.87	20/200		R. Japan, Japan	
17790	16.86	75/100		BBC, London, Gt. Britain	
17795	16.86	20/100	ORU	Wavre, Belgium	
	16.86	100		R. Budapest, Hungary	
	16.86	100		Schwarzenburg, Switzerland	
	16.86	100		Armavir, USSR	
	16.86	20/200		R. Japan, Japan	
	16.86	5		Manaus, Brazil	
17800	16.85	1/50		Vienna, Austria	
	16.85	50/100		R. Nederland, Holland	
	16.85	50/60/100		R. Roma, Italy	
	16.85	50/250/500		Greenville, USA	
17805	16.85	1/50		Vienna, Austria	
	16.85	10/100/250		R. Free Europe, Germany	
	16.85	20		Paradys, So. Africa	
17810	16.84	75		BBC, London, Gt. Britain	
	16.84	50/100		R. Nederland, Holland	
	16.84	120/240		Peking, China	
	16.84	50	YDF4	Djakarta, Indonesia	
	16.84	2	DZI6	Call of the Orient, Philipp.	
17815	16.84	50		Frunze, USSR	
	16.84	35/50/100		Tanger (VOA), Morocco	
	16.84	10		R. Dif. de São Paulo, Brazil	
17820	16.84	1/50		Vienna, Austria	
	16.84	100		Schwarzenburg, Switzerland	
	16.84	100	TAV	R. Ankara, Turkey	
	16.84	10/50/100		R. Australia, Australia	
	16.84	50		R. Canada, Canada	
	16.84	50/200		Delano, USA	
	16.84	50	DL2	AFRTS, Los Angeles, USA	
17825	16.83	100		Praha, Czechoslovakia	
	16.83			R.Berlin Int, Germ. (DDR)	
	16.83	10/120	LLN	R. Norway, Norway	
	16.83	100		Kursk, USSR	
	16.83	20/200		R. Japan, Japan	
17830	16.83	35		Colombo, Ceylon	
	16.83	10/100	VUD	AIR Delhi, India	
	16.83	35/100		Poro (VOA), Philippines	
	16.83	110		Bethany, USA	
17835	16.82	10/100/250		R. Free Europe, Germany	
	16.82	120/240		Peking, China	
	16.82	10/50		Karachi, Pakistan	
	16.82	7.5/10		Dacca, Pakistan	
17840	16.82	1/50		Vienna, Austria	
	16.82	10/100/250		R. Free Europe, Germany	

kc	m	kW	Call	Stations & countries	Rem.
17840	16.82	50/100		R. Nederland, Holland	
	16.82	50		Moscow, USSR	
	16.82	25/100		Vatican Radio	
	16.82	10/50/100		R. Australia, Australia	
17845	16.81	20/100	ORU	Wavre, Belgium	
	16.81	100	DMQ17	Deutsche Welle, Germany	
	16.81	100		Hörby, Sweden	
	16.81	100		Schwarzenburg, Switzerland	
17850	16.81	100		Allouis, France	
	16.81	50		Moscow, USSR	
	16.81			Pyongyang, Korea(Dem.Rep.)	
	16.81	50/200		Dixon, USA	
	16.81	10	PRL9	R. Nacional Rio, Brazil	
17855	16.80	1/50		Vienna, Austria	
	16.80	10/100/250		R. Free Europe, Germany	
	16.80	35/100		Tanger (VOA), Morocco	
	16.80	10/100	VUD	AIR Delhi, India	
	16.80	20/200		R. Japan, Japan	
	16.80	10/100		R. Habana, Cuba	
17860	16.80	20/100	ORU	Wavre, Belgium	
	16.80	15/100		BBC, London, Gt. Britain	
	16.80	50		Kursk, USSR	
	16.80	50/250		Monrovia (VOA), Liberia	
	16.80	120/240		Peking, China	
	16.80	50		Djakarta, Indonesia	
17865	16.80	20		Damascus, Syria	
17870	16.79	100	DMQ17	Deutsche Welle, Germany	
	16.79	75/100		BBC, London, Gt. Britain	
	16.79	50		Riazan, USSR	
	16.79	50/250		Monrovia (VOA), Liberia	
	16.79	20/200		R. Japan, Japan	
	16.79	10/50/100		R. Australia, Australia	
17875	16.79	1/50		Vienna, Austria	
	16.79	10/100/250		R. Free Europe, Germany	
	16.79	20/200		R. Japan, Japan	
	16.79	50/250/500		Greenville, USA	
	16.79	7.5	PRL2	R. Dif. Educação, Brazil	
17880	16.78	15/100		BBC, London, Gt. Britain	
	16.78	100	CSA45	R. Nacional, Portugal	
	16.78	50		Erevan, USSR	
	16.78	15/120		Peking, China	
	16.78	7.5/100		BBC, Singapore	
17885	16.78	10/100/250		R. Free Europe, Germany	
	16.78	20/50		R. Liberty, Germany	
	16.78	20		Paradys, S. Africa	
	16.78	120/240		Peking, China	
	16.78	50/250/500		Greenville, USA	
17890	16.77	15/100		BBC, London, Gt. Britain	
	16.77	10/100	VUD	AIR Delhi, India	
	16.77	7.5/10		Dacca, Pakistan	
	16.77	7.5/100		BBC, Singapore	
	16.77	50	BED40	Taipei (BCC), Taiwan	
	16.77	30	HCJB	Voz de los Andes, Ecuador	
17895	16.76	20/50		R. Liberty, Germany	
	16.76	100	CSA66	R. Nacional, Portugal	
	16.76	50		Kaunas, USSR	
	16.76	20/200		R. Japan, Japan	
17900	16.76	15/240		Peking, China	
				17910–21450 kc	
17910	16.75	100		Accra, Ghana	
17920	16.74	50/100		Cairo, Un. Arab. Rep.	
18080	16.59	15/100		BBC, London, Gt. Britain	
18150	16.53	15/100		BBC, London, Gt. Britain	
*18985	15.94	8	OLD2	Praha, Czechoslovakia	
**19640	15.20		GIA39	Hailsham, Gt. Britain	
*20000	15.00	1	WWV	Lanham, USA	
				21450–21750 kc (13 metre band)	
21450	13.99	100		Praha, Czechoslovakia	
21455	13.98	35/50/100		Tanger (VOA), Morocco	
	13.98	75		BBC, London, Gt. Britain	
21465	13.98	7.5/10		Dacca, Pakistan	
21470	13.97	75/100		BBC, London, Gt. Britain	
	13.97	75/100	DYH9	Dumaguete City, Philipp.	
21475	13.97	50		Simferopol, USSR	
21480	13.97	7.5/5		Athens, Greece	
	13.97	50/100		R. Nederland, Holland	
21485	13.96	10/100/250		R. Free Europe, Germany	
	13.96	25/100		Vatican Radio	
21485	13.96	7.5/100		BBC, Singapore	
	13.96	110		Bethany, USA	
21490	13.96	15/100		BBC, London, Gt. Britain	
21495	13.96	100	CSA67	R. Nacional, Portugal	
21500	13.95	1.5/50		R. Brazzaville, Congo	
21505	13.94	100		Serpukhov, USSR	
21510	13.94	20/100	ORU	Wavre, Belgium	
21520	13.94	100		Schwarzenburg, Switzerland	
21525	13.94	1/10/50		R. Kuwait, Kuwait	
21530	13.93	75		BBC, London, Gt. Britain	
	13.93	100		Leningrad, USSR	
21535	13.93	1		ELWA, Liberia	
21540	13.93	10/50/100		R. Australia, Australia	
21545	13.92	100		Accra, Ghana	
21550	13.92	75/100		BBC, London, Gt. Britain	
21560	13.91	50/60/100		R. Roma, Italy	
21565	13.91	50/100		R. Nederland, Holland	
21570	13.91	50/100		R. Nederland, Holland	
	13.91	10/50		Karachi, Pakistan	
	13.91	35/100		Poro (VOA), Philippines	
21580	13.90	100		Allouis, France	
	13.90	10/100	VUD	AIR Delhi, India	
	13.90	10/50		Karachi, Pakistan	
21585	13.90	120		Minsk, USSR	
21590	13.90	10/50		Karachi, Pakistan	
21595	13.89	15/100		BBC, London, Gt. Britain	
21600	13.89	10/100/250		R. Free Europe, Germany	
	13.89	15/100		BBC, London, Gt. Britain	
	13.89	100		Leningrad, USSR	
	13.89	50/250/500		Greenville, USA	
21610	13.88	15/100		BBC, London, Gt. Britain	
	13.88	110		Bethany, USA	
21615	13.88	75		BBC, London, Gt. Britain	
21620	13.87	10/100/250		R. Free Europe, Germany	
	13.87	100		Allouis, France	
21625	13.87	50/100		R. Nederland, Holland	
21630	13.87	75/100		BBC, London, Gt. Britain	
21640	13.86	15/100		BBC, London, Gt. Britain	
	13.86	50		Baku, USSR	
21650	13.86	100	DMQ21	Deutsche Welle, Germany	
	13.86	50		Kalatch, USSR	
	13.86	7.5/100		BBC, Singapore	
	13.86	50/200		Dixon, USA	
21660	13.85	75		BBC, London, Gt. Britain	
21665	13.85	10/100/250		R. Free Europe, Germany	
	13.85	50/100		R. Nederland, Holland	
21670	13.84	5	LLP	R. Norway, Norway	
21675	13.84	75/100		BBC, London, Gt. Britain	
21680	13.84	10/100/250		R. Free Europe, Germany	
	13.84	75/100		BBC, London, Gt. Britain	
21685	13.83	10		Dacca, Pakistan	
21695	13.83	35/50/100		Tanger (VOA), Morocco	
	13.83	50		Tashkent, USSR	
21700	13.83	100	CSA49	R. Nacional, Portugal	
21710	13.83	75/100		BBC, London, Gt. Britain	
21715	13.82	50/100		R. Nederland, Holland	
21720	13.81	10/100/250		R. Free Europe, Germany	
	13.81	7.5/100		BBC, Singapore	
21730	13.81	5	LLQ	R. Norway, Norway	
21740	13.80	15/100		BBC, London, Gt. Britain	
21745	13.80	10/100/250		R. Free Europe, Germany	
*25000	12.00	0.1	WWV	Lanham, USA	
				25600–26100 kc (11 metre band)	
25610	11.71	50/100		R. Nederland, Holland	
25645	11.70	7.5/5		Athens, Greece	
25650	11.70	100		BBC, London, Gt. Britain	
25670	11.69	100		BBC, London, Gt. Britain	
25720	11.66	100		BBC, London, Gt. Britain	
25750	11.65	100		BBC, London, Gt. Britain	
25840	11.61	100		BBC, London, Gt. Britain	
25850	11.60	15/100		BBC, London, Gt. Britain	
25900	11.58	2	LLA	R. Norway, Norway	
25920	11.57	15/100		BBC, London, Gt. Britain	
25965	11.55	7.5/5		Athens, Greece	
26040	11.52	15/100		BBC, London, Gt. Britain	
	11.52	50/100		R. Nederland, Holland	
26080	11.50	15/100		BBC, London, Gt. Britain	

TABLE OF SHORTWAVE STATIONS to the Summer-Supplement 1965.

In order to make this as complete and up-to-date as possible we direct an earnest appeal to **all radio stations using shortwave** to send us regularly their transmission- and/or programme-schedules.

A DIRECTORY OF THE ADVERTISERS

George P. Adair Engineering Company, Washington 6 DC, USA. 206
ABC Films, Inc, New York, USA 261
ABC International Television, Inc, New York, USA 271
Akustische u. Kino-Geräte Gesellschaft m.b.H., Vienna XV, Austria 3'cover page
All India Radio, New Delhi, India 171
Antilles Radio Corporation, Riverfield, Leeward Isl 217
Asahi Broadcasting Co., Osaka, Japan 177
Audio Devices, Inc., New York, NY, USA 39
Australian Broadcasting Commission, Melbourne, Australia 189
Braun AG, Frankfurt am Main, Germany 17
Brown, Boveri & Company, Ltd., Baden, Switzerland 67
Canadian Broadcasting Corpo, Montreal, Canada 199
CBS Films, New York, NY, USA 263
CCA Electronics Corporation, Yeadon, Pa, USA 40
Collins Radio Co., Dallas, Texas, USA 93
Compagnie Francaise Thomson-Houston, Paris VIII, France backcover
Continental Electronics Manufacturing Co, Dallas 17, Texas, USA 43, 53
CSF Division International, Paris 8, France 59
Deutsche Welle, Cologne, German Fed. Rep 107
Deutschlandfunk, Lindenalle 7, Cologne-Marienburg, German Fed. Rep 105
Elektromesstechnik Wilhelm Franz, KG, Lahr, Germany 81
E.M.I. Electronics Ltd, Hayes, Middlesex, England 91
European Broadcasting Union (EBU), Belgium, Switzerland 102
Fernseh GMBH, Darmstadt, German Fed. Rep 29
Fuba, (Hans Kolbe & Co.), Bad Salzdetfurth, Germany 58
Gates Radio Company, New York 16, USA 11
Gevaert Agfa N.V., Mortsel, Antwerp, Belgium 75
Ghana Radio & TV Corpo. Accra, Ghana 01
Greater Publications Pty, Sydney, Australia 193
Hammarlund Manufacturing Company Inc, New York 16, N.Y., USA 23
Hyperelec, Paris, France 13
IBRA, Radio Federation, Stockholm 1, Sweden 137
International Radio and Television Organization (OIRT), Prague, Czechoslovakia 113
Kathrein Antennen, Rosenheim, W. Germany 41
Laboratoire Industriel d'Electronique Belin, Rueil-Malmaison, Fr. 7
Loewe Opta A.G., Kronach, Germany 47
The Marconi Company Limited, Chelmsford, England 3
Microwave Association Inc, Burlington Mass, USA 79
MGM Telestudios, Inc, New York, NY, USA 255
Minnesota Mining and Mfg. Co., Minnesota, USA 49
Mole-Richardson Organisation, London, England 87
National Association of Commerc al Broadcasters in Japan, Japan 177
N.B.C. International, New York, N.Y. USA 267
National Radio Company Inc, Melrose, Massachusetts, USA 73
Georg Neumann, Berlin S.W. 61. German Fed. Rep 03
Nigerian Broadcasting Corporation, Lagos, Nigeria 160
Nippon Hoso Kyokai, Japan Broadcasting Corp. Tokyo, Japan 175
Nippon Electric Company Ltd, Tokyo, Japan ..... 2nd cover page
Norwegian Broadcasting Corpo. Oslo, Norway 125
Ocora (Office de Cooperation Radiophonique), Paris 9e, France. 103
Philips, Eindhoven, Hilversum, Holland 05, 34, 35
Polskie Radio i Telewizja (Polish Radio and Television). Komitet de spray Radiofoni, Warszawa, Poland 37
Pye TVT, Ltd, Cambridge, England 27
Radio Andorra, Andorre la Vielle 95
Radio Corporation of America (RCA), Clark, N.J., USA 18, 19, 30,31
Radio Clube de Mozambique, Lourenco Marques, Mozambique 158
Radio Denmark, The Voice of Denmark, Copenhagen V, Denmark 101
Radio Iran, Ministry of Information, Teheran, Iran 173
Radiotelevisione Italiana (RAI), Rome, Italy 21
Radio Malaysia, Kuala Lumpur, Malaysia 181
Radio Moscow, Moscow, USSR 141
Radio Nacional de Espana, Madrid, Spain 129
Radio Nederland Wereldomroep, Hilversum, Holland 119
Radio New York Worldwide, Worldwide Communications Center, New York 19, N.Y., USA 207, 208
Radio Portugal, Lisboa, Portugal 127
Radio Voice of the Gospel, Addis Ababa, Ethiopia 153
Radio Prague, Prague, Czechoslovakia 99
Raytheon Comp. International Sales and Services, Lexington, Massachusetts, USA 61
Red de Emisoras del Movimiento, Madrid, Spain 131
Rola Company (Australia) Pty Ltd, Richmond, Vic, Australia ... 15
Seven Arts Productions International, USA 249
Scully, USA 47
Shure Brothers Inc, Export Department, Evanston, Ill, USA ... 02, 9
Siemens & Halske AG, Munich, German Fed. Rep 83
Siemens & Halske GmbH, Vienna III, Austria 45
Singer Products Company Inc, New York 4, N.Y. USA ... 06, 63, 89
Sony, Tokyo, Japan 51
Stratton & Co. Ltd, Birmingham, England 38
Swedish Broadcasting Corp. Radio Sweden, Stockholm 1, Sweden 134, 135
Swiss Broadcasting Corp., Berne, Switzerland 139
Telecommunications Journal ITU, Geneva, Switzerland 123
Tele-Projects Corp. Communications Systems Engineers, New York 16, N.Y., USA 55
Thomas J. Valentino, Inc' New York, N.Y., USA 37
Time-Life, Inc. USA, STV, Stockholm, Dumont-Time, Cologne. 251
Trans World Radio, Bonaire, Neth. Antilles 221
TRT, Telecommunications Radioelectriques and Telephoniques, Services Commerciaux, Paris 13e, France 25
Television International Enterprises Ltd London, England 85
Trylon Inc, New York, N.Y., USA 33
Telesco International Corpo, New York, N.Y. USA 65
Tuchel-Kontakt GmbH, Heilbronn, Neckar, German Fed. Rep ... 77
UPI Newsfilm, New York, USA 257
W. Vinten Ltd, London, England 71
Visual Electronics International, New York 18, N.Y., USA 57
Voice of America, U.S. Information Agency, Washington 24, D.C., USA 5
Voice of the Andes (HCJB), International Missionary Station, Quito Ecuador 239
Voice of Free China (BCC), Taipei, Taiwan 168
World Publications, Lindorffsalle 1, Hellerup, Denmark .. 52, 64, 149
Zenith Radio Corporation, Chicago, USA 69

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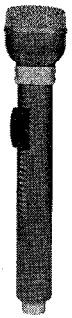

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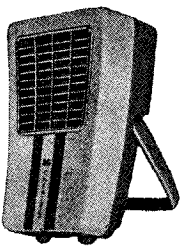

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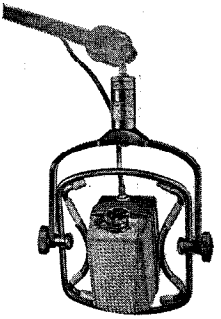

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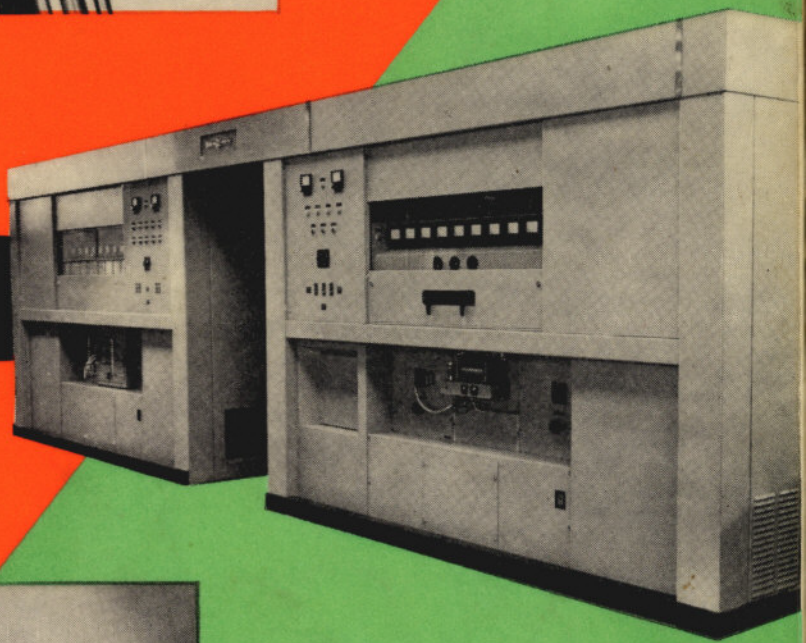

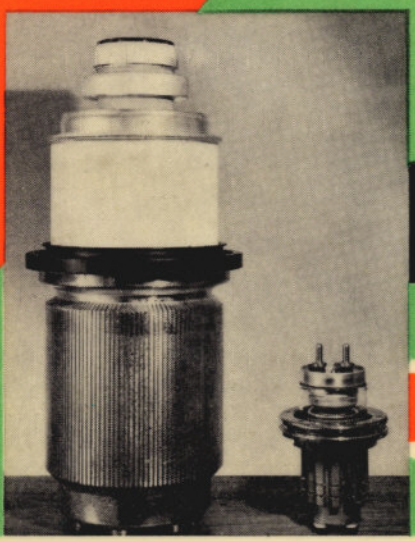

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